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MEDICAL
# JOURNAL
West Virginia State Medical Association

January/February 2000 Vol. 96, No.1 wvsma.com

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Journal

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A New WVSMA

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## Seminars

**Issues in Medical Ethics Basic Certificate Program**
Friday, Mar. 3, 2000
8 a.m. - 4:30 p.m.
Robert C. Byrd Health Sciences Center of West Virginia University/ Charleston Division
Mary Lou Lewis, MD
Robert. Hall, PhD
Program Chairmen

**27th Annual Newborn Day**
Friday, Mar. 24, 2000
8 a.m. - 4:30 p.m.
Robert C. Byrd Health Sciences Center of West Virginia University/ Charleston Division, Auditorium
Stefan R. Maxwell, MD
Program Chairman

**Obstetrics and Gynecology Update: Pre-conference for Family Physicians**
Thursday, Apr. 6, 2000
5 p.m. - 9:00 p.m.
Charleston House Holiday Inn
Charleston, WV
E. Reed Heywood, MD
Program Chairman

**Resident Research Day**
Thursday, Apr. 11, 2000
8 a.m. - 4:30 p.m.
Robert C. Byrd Health Sciences Center of West Virginia University/ Charleston Division, Auditorium
Michael J. Lewis, MD
Program Chairman

**Pain and Suffering: A Multidimensional Approach**
Wednesday, May 17, 2000
7:30 a.m. - 4:15 p.m.
University of Charleston
Charleston, WV
Carolyn Sue Warren, MD
Program Chairwoman

## Outreach Programs

**Evaluation and Therapy for Swallowing Disorders**
Wednesday, Mar. 1, 2000
12:15 p.m.
Montgomery General Hospital
Montgomery, WV
Peter Americo, MS, CCC, SLP

**Update on Blood and Blood Product Transfusion**
Wednesday, Mar. 1, 2000
Fayette County Medical Society
Plateau Medical Center
Oak Hill, WV
Mary B. Taylor, MD

**Evaluation and Therapy for Swallowing Disorders**
Wednesday, Mar. 15, 2000
6:00 p.m.
Man ARH
Man, WV
Peter Americo, MS, CCC, SLP

**Food-Borne Disease**
Wednesday, Mar. 22, 2000
11:45 a.m.
Summers County ARH
Hinton, WV
Donald M. Rosenberg, MD

**Use of Heparin**
Wednesday, Apr. 5, 2000
12:15 p.m.
Montgomery General Hospital
Montgomery, WV
Kristy Lucas, PharmD

**DKA**
Friday, Apr. 14, 2000
11:45 a.m.
Logan General Hospital
Logan, WV
Women & Children's Hospital
Pediatric Transport Team

**Herbal Medicine**
Wednesday, May 3, 2000
12:15 p.m.
Montgomery General Hospital
Montgomery, WV
Shelda Martin, MD

Camcare Health Education and Research Institute

West Virginia Medical JOURNAL

P.O. Box 4106
Charleston, WV 25364
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Charleston

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### *On The Cover*

**The fireworks celebration on New Year's Eve in Charleston.**
*Photo by Tom Hindman, Charleston Daily Mail*

**The staff of the West Virginia State Medical Association.**
*Photo by Bob Bird, Charleston*

*Cover Design by Joel Sites, Chapman Printing Company*

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# Manuscript Guidelines

All articles for the *West Virginia Medical Journal* must be submitted on an IBM compatible disk. Microsoft Word 97 is preferred, but other languages are acceptable. If the manuscript contains tables, the main body of the manuscript and references should be saved as one item, i.e., *article*, and then each table should also be saved as a separate item, i.e., *Table 1, Table 2*.

All scientific manuscripts should be prepared in accordance with *"Uniform Requirements for Manuscripts Submitted to Biomedical Journals."* Papers will not be considered for publication if they have already been published or are described in a manuscript submitted or accepted for publication elsewhere. All persons designated as authors should have participated enough in the work to take public responsibility for the concept.

Manuscripts should be accompanied by one extra copy, be double-spaced, have each page numbered and should include a title page, an abstract of no more than 150 words, and references numbered consecutively. No more than 10 references will be published and then a statement will appear that the author should be contacted for the other references listed in the manuscript.

Tables, figures and photos should be numbered, and indicated with parentheses whenever they are mentioned in the text, i.e. (Table 1), (Figure 1). Legends should be included for all figures and photographs.

Photos must be unmounted glossy prints in a 5 x 7 format or smaller. Black and white photos are preferred. Cost of printing photos in excess of four will be billed to the author at a cost of $13 for each photo. Each photo should have a label pasted on its back indicating its number, the author's name and an indication of its "top." Do not write on the back of photos, scratch or mar them with paper clips, or mount them on cardboard. Drawings and charts should be created in black and white.

All scientific material is reviewed by the editor and three members of the Publication Committee. Other articles are usually only reviewed by the editor. All articles should be addressed to:

F. Thomas Sporck, M.D., F.A.C.S., Editor
*West Virginia Medical Journal*
P.O. Box 4106
Charleston, WV 25364

If you have questions or need more information, phone Nancy L. Hill, managing editor at (304) 925-0342.

# President's Page

## Tobacco settlement must be used appropriately

In November 1998, Attorney General Darrell McGraw entered into a settlement agreement with three major tobacco companies on behalf of West Virginia. The purpose of the suit was to recover some of the costs attributable to tobacco use and to decrease tobacco use in West Virginia.

Now that the suit has been settled, we learn that there is no **legal** requirement that **any** of the money be spent on the purposes outlined in the suit. State legislatures are free to spend the money any way they want, ignoring the very reasons the suit was filed in the first place.

West Virginia's share of the settlement will soon total $118 million with $60 to $70 million dollars per year thereafter. Governor Underwood has proposed that only $5 million be spent on a comprehensive tobacco control program. I suppose, the vast majority of the money will then be spent on unrelated areas. If this is the case, then the **only** real winners will be the plantiff attorneys who filed the lawsuits. That may be true anyway, but that is a topic for another editorial and I digress.

The tobacco industry spends $35 million a year promoting tobacco use in West Virginia alone. Much of the money is spent targeting our youth, with the Joe Camel campaign being the best example. For the tobacco industry to survive, they desperately need replacement smokers. They have placed their deadly gunsight squarely on our youth. Their advertising campaigns work amazingly well. They emphasize vigor, sexual attraction, rebellion and independence. These are themes which appeal to teens struggling with those very issues.

West Virginia has one of the worst teen-smoking rates in the nation: 42% of our youth are now smoking! This is an absolute disaster in the making.

Can anything be done? Sure! California cut its youth-smoking rate to

18% with a comprehensive tobacco control program. We **have** to do this. Tobacco is destroying our state. We spend over $600 million a year paying for health care costs which are related to smoking, and Medicaid spends over $120 million per year. Exposure to second-hand smoke results in $30 million in pediatric illnesses alone. Illnesses that include severe asthma attacks, some of which result in death.

How many more children will be condemned to this horrible death before we act? Pregnant women who smoke have a high rate of low birth-weight babies. The health care costs of these unfortunate souls are enormous. Many still end up blind with severe mental deficiencies.

How many more innocent babies will be condemned to this fate before we act? One **cannot** overstate the devastation of tobacco. Tobacco kills more Americans each year than alcohol, AIDS, murders, suicides, car accidents, cocaine, heroin and fires — **COMBINED**!

Tobacco is killing us and costing us a fortune. And, make no mistake, those of us who don't smoke are paying a lot of money for the health care costs for those of us who do.

What is to be done? The Legislature must pass a comprehensive tobacco control program featuring youth programs, cessation and prevention programs and counter marketing strategies. And, they must fund it well. To succeed at anything you need to get organized, develop a good game plan and then fund it well. If you fail in any area, then you are programmed for failure.

I am sorry, but the governor's proposal for $5 million is programmed for failure. We must spend much more than this. The CDC in Atlanta estimates that an effective, comprehensive tobacco control program in West Virginia would cost approximately $30 million. Remember, the tobacco industry spends $35 million each year pushing their product. I feel we must match them dollar for dollar. And that would still only use half the settlement money. Money that really should be spent on nothing else, but I digress again.

The Legislature must also raise the excise taxes on tobacco. Our cigarette excise tax is one of the lowest in the nation at 17 cents. Michigan increased their tax to 75 cents in 1995 with astonishing results. Their tax revenues went up, consumption went way down and hundreds of millions of dollars were saved! Imagine passing laws that generate hundreds of millions of dollars for state government. You would think this would be easy. It makes you wonder how many of our legislators are in big tobacco's pocket, but I digress again. West Virgina does not even have a tax on smokeless tobacco.

Call your legislator today! Tell everyone you know to call or write. Make copies of this article and pass them out. Our Legislature has programmed us for failure for far too long. It is time to demand success.

Phillip R. Stevens, M.D.

# Editorial

## The new millennium

It is a great honor for me to have been asked to serve as the editor of the *West Virginia Medical Journal.* I appreciate very much the confidence placed in me by the members of the Publication Committee, the Executive Committee and Council.

It is my hope that the same editorial freedom the *Journal* has enjoyed will continue to be our tradition for many years. We will always welcome letters to the editors and guest editorials.

At our Publications Committee meeting on January 21 during the WVSMA's Mid-Winter Clinical Conference, the members requested that a higher percentage of the Journal's pages be devoted to scientific articles. You will notice this increase in scientific content this issue.

One other notable change this issue is our new cover. This first cover of the new millennium was especially created to highlight the staff of the WVSMA and the organization's new direction. After this issue, the covers will continue to feature color photographs featuring scenes in West Virginia, but in a smaller boxed in vertical format with the new masthead above the photograph. I know that many of you are accomplished amateur photographers. If you have a picture that you think might make an attractive cover, please submit it to us.

Since many people are reflecting on the past century right now in editorials and other commentaries, I would like to take this opportunity to discuss some landmark events in Medicine.

One event that comes to mind is the publication in 1910 of the *Flexner Report on Medical Education in the United States and Canada* by the Carnegie Foundation. This report had been commissioned because people were practicing medicine with extremely different educational backgrounds. As a result, much of the medical school curriculum that still serves us well today was established.

As we enter this new century, so-called mid-level practitioners of various backgrounds are attempting to practice Medicine. Hopefully, the work of Flexner will not have to be repeated.

The major advancements of the first half of the century were in public health with the control of infectious and communicable diseases and the advent of antibiotics. The second half of the century brought major technological changes with vast improvements in anesthesia techniques and monitoring, organ transplantation, non-invasive diagnostic imaging and a veritable explosion of our pharmacologic armementarium. The last part of the century brought dramatic improvements in the way we store and access information. As a result of all these phenomenal advancements, the average life expectancy nearly doubled during the last century — from 45 to 80.

In 1929, only 1.5% of Americans were covered by health insurance. Large numbers of people were not covered by health insurance until World War II. Today, 85%-90% (depending on whose numbers you believe) of the population is covered by some type of plan. As the current fad of "managed care" begins to fade from the scene, the major question will continue to be *"How will we pay for health care?"*

This is unquestionably an exciting time to be practicing medicine. In my specialty, stem cell research holds major promise in the treatment of head and neck cancer as well as sensorineural hearing loss.

What's on the horizon for your specialty?

F. Thomas Sporck, M.D., F.A.C.S.
Editor

# AMA Delegation Report

The WVSMA delegation to the AMA's Interim Meeting in San Diego, Dec. 5-8, consisted of Delegates Constantino Amores, M.D., James Helsley, M.D., John Holloway, M.D., and Michael Fidler, M.D.; Alternate Delegates Alva Deardorff, M.D., and Joseph Selby, M.D.; WVSMA President Phillip Stevens, M.D.; Council Chairman David Avery, M.D.; American College of Radiology Delegate Ronald Cordell, M.D.; and WVSMA Executive Director Evan Jenkins. Highlights of the meeting included the following actions:

*The House passed a resolution calling for creation of an 800 number for the rendering of immediate legal and coding advice to physicians who may find themselves approached by government investigators. There were reports of physicians being given surprise inspections under the guise of searching for fradulent activities. Physicians subjected to these searches found themselves without immediate legal and insurance coding advice. After considerable discussion, this issue was referred to the Board of Trustees for action.

*The AMA released a new collection of information highlighting recent events in the field of medicine. This product is called *"Good News From the AMA."* It is available on CD as a slide presentation and mentions the passage of the Patients' Bill of Rights, the decision by United Health Care eliminating prior authorization, and the collection of 173 sponsors of HR 1304, the Campbell bill. All WVSMA delegates and alternates have a copy of this CD available for loan to any interested medical society.

* Representative Tom Campbell of California addressed the House of Delegates to express his thanks for the help of the AMA promoting HR 1304 through the U.S. House of Representatives. He reported that Speaker Hastert has agreed to bring the bill out of committee and to the floor for a vote in early February. He is confident that his bill will pass the House of Representatives and move onto the U.S. Senate. A fundraiser was held at the meeting on his behalf; he does not accept PAC contributions. *(Representative Campbell has served as a professor at Stanford University Law School on the subject of anti-trust law. He is a national expert on this issue and seems quite passionate that anti-trust, as it was originally designed, never intended to encompass physicians rendering medical care services.)*

*Support for the National Patient Safety Foundation was affirmed during the House of Delegates. This action was based on a non-punitive, non-discoverable approach to the reporting of medical incidents. The intent is to help physicians improve care for their patients. The Clinton Administration seems bent on taking this national reporting system of medical incidents to a level that only insures job security for trial lawyers and does nothing to help patients or physicians.

*The AMA announced that has instituted electronic desemination of information. All actions of the House of Delegates are posted on the AMA website www.ama-assm.org within hours after the close of the meeting.

In addition to the House of Delegates deliberations, there were 10 Reference Committee meetings which our delegation took part in during the AMA's Interim Meeting.

Respectfully submitted,

Constantino Amores, M.D.

James D. Helsley, M.D.

# NLDC

National Leadership Development Conference

## Save the date!

**March 25-28, 2000**

Fontainebleau Hilton Hotel
4441 Collins Avenue
Miami Beach, Florida 33140

# Is it good medicine?

## A call to lead: A challenge to serve

Make plans now to join virtually every leader in organized medicine today in sunny Miami Beach for the **2000 National Leadership Development Conference**.

Plenary sessions will feature nationally acclaimed speakers and panel participants.

**Tom Peters, PhD**, acclaimed author of *In Search of Excellence* and *The Circle of Innovation,* is the keynote speaker.

**Ian Morrison, PhD**, Senior Fellow, Institute for the Future, and noted author and consultant, will address *Healthcare in the New Millennium.*

Interactive break-out and optional sessions will include opportunities such as the *AMA/Intel Internet Health Road Show* and:

- Future role of medical associations
- Breakfast and luncheon dialogues with your AMA leadership
- How to write a speech
- Media interview skills update
- Regaining physician collegiality in the medical profession
- Medical practice management
- Association management and team building
- Leadership skill building

**To register for the NLDC** and for additional information:

Call the AMA registration hotline, 800 262-3211 or visit the NLDC Web site, www.ama-assn.org

**To reserve a hotel room:**
Call 800 548-8886 or 305 538-2000 or visit the hotel Web site, www.hilton.com

To receive special room rates, be sure to:

Identify yourself as a participant in the 2000 National Leadership Development Conference. Register before the February 25, 2000, cut-off date.

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This day-long skill-building experience on March 25, 2000, is by invitation only and is limited to 50 physicians. The program aims to help physicians succeed in the legislative/regulatory, organized medicine, and managed care arenas.

American Medical Association
Physicians dedicated to the health of America

# Effective communication enhances relationships

Q. **I know that communication is a common contributor to medical malpractice claims. Do you have any tips which I could incorporate into my relationships with my patients that may reduce the liability risk?**

A: Poor communication is probably responsible for more malpractice claims than outright bad medicine. Patients who feel ignored or slighted, interrupted or brushed off, are more likely to file suit than those patients who perceive they have a positive relationship with their physician. Good communication puts a "face" on the care your patients receive.

Maintaining communication and rapport with your patients doesn't require a huge amount of extra effort, but it does take commitment. Risk management experts suggest that you consider incorporating the following points into your routine:

- Encourage patients to take active roles in discussing options in care.
- Try to focus on the person rather than the words themselves. Ask yourself, "This is what it means to me; what does it mean to the patient?"
- Paraphrase frequently and ask the patient to restate your message to make sure they understand.
- Avoid non-factual information, opinions, assumptions and judgmental comments in written and verbal communications.
- Record all forms of communication in the patient's record. One-on-one discussions, distribution of educational material, counseling services, etc., should be included.
- Provide a non-stressful, non-rushed environment for all informed consent discussions with patients.
- Express empathy.

Cultivating caring relationships with your patients can directly influence the quality of care delivered and can have a profound impact on the perceptions patients have about the quality of care they receive. All of which can help reduce the liability threat you face.

Physicians insured by Medical Assurance, the WVSMA's endorsed professional liability carrier may contact the company's Risk Resource Center for prompt answers to liability questions by calling (800) 282-6242 or via e-mail at rmhelp@maih.com.

# MA expands coverage

Medical Assurance continues to respond to the changing medical/legal environment in West Virginia by expanding and enhancing the coverages available to its insureds. Now, all policies issued on or after Feb. 1, 2000, will include the additional coverages for defense costs of investigations associated with the following:

- Alleged COBRA violations
- Utilization and quality control peer review proceedings
- Allegations of sexual misconduct
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- Allegations of Medicare/Medicaid fraud and abuse
- Investigations by a state board of medical examiners or similiar body
- Allegations of errors and omissions in billing statements for professional services

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# Cardiomyopathy in children

***ENID GILBERT-BARNESS, M.D.***
*Departments of Pediatrics, Pathology and Obstetrics and Gynecology, University of South Florida, Tampa, Fla.*

***ROBERT J. MARSHALL, M.D., M.A.C.P.***
*Clinical Professor of Medicine, West Virginia University School of Medicine, Morgantown*

*This paper is based in part on a Milton R. Hales, M.D. Lecture which was presented at the West Virginia University School of Medicine in Morgantown.*

## Abstract

***The cardiomyopathies are a group of disorders of the myocardium associated with a decrease in cardiac function. This article describes the three functional types: (1) dilated or congestive; (2) obstructive, as in hypertrophic cardiomyopathy, and (3) restrictive as in infiltrative disorders such as the storage diseases.***

## Introduction

The cardiomyopathies are a group of disoders of the myocardium associated with a decrease in cardiac function.

There are three types of functional cardiomyopathies which are:

(1) dilated or congestive;
(2) obstructive, as in hypertrophic cardiomyopathy, and,
(3) restrictive as in infiltrative disorders such as the storage diseases.

A number of disorders of myocardial function occur in the newborn infant that result from complications that occur either in the fetus or are the result of perinatal complications (1). These conditions are listed in Table 1.

Dilated cardiomyopathy most commonly occurs in infants one to six months of age (50% before one year). It may be a consequence of myocarditis due to viral infections, particularly Coxsackie $B_3$ in infants, and may also be related to primary endocardial fibroelastosis.

**Table 1. Perinatal Complications Associated with Myocardial Dysfunction**

- **Birth asphyxia**
- **Persistent fetal circulation**
- **Fetal hydrops**
- **Meconium aspiration**
- **Maternal diabetes mellitus**
- **Disseminated intravascular coagulation**
- **Fluid overload**
- **Maternal lupus**
- **Diaphragmatic hernia**
- **Fetomaternal transfusion**
- **Maternal cocaine**
- **Sepsis**

## Endocardial fibroelastosis

Endocardial fibroelastosis (EFE) is a focal or, more commonly, diffuse proliferation of fibroelastic tissue beneath the endocardium, mainly of the left ventricle (LV). This may result in result in restrictive or dilated cardiomyopathy (1).

It is believed to be related to an intrauterine viral infection.

## Metabolic cardiomyopathies

A list of metabolic disorders that both frequently and predominantly affect the cardiovascular system is shown in Tables 2 and 3.

## Carnitine deficiency

Carnitine is an essential cofactor in the transfer of long-chain fatty acids across the inner mitrochondrial membrane. The disease is diagnosed by muscle biopsy and by the direct measurement of carnitine concentrations in plasma.

Systemic carnitine deficiency is generally diagnosed early in life and two clinical subtypes are recognized. One is associated with multiple episodes of acute encephalopathy which resemble Reye syndrome (3-5). The other is associated with cardiomyopathy characterized by cardiomegaly and congestive failure at an early age (2) with striking T-wave changes in the EKG.

The clinical response to L-carnitine may be dramatic. Determination of plasma carnitine and skeletal muscle biopsy seems justified in all patients with familial cardiomyopathy.

**Table 2. Metabolic Cardiomyopathies.**

***Disorders of amino acid metabolism***

- Alkaptonuria
- Homocystinuria
- Oxalosis
- Hyperglycinemia
- Carnitine deficiency
  - Primary
  - Secondary

***Mitochondrial disorders (with or without morphologically abnormal mitochondria)***

- Respiratory chain disorders
- Cytochrome-c reductase coenzyme deficiency
- Cytochrome-c oxidase deficiency
- Cytochrome-c oxidase deficiency with histiocytiod cardiomyopathy
- Kearns-Sayre syndrome
- MELAS syndrome
- MERRF syndrome
- X-linked mitochondrial myopathy (Barth syndrome)

***Neuromuscular diseases***

- Duchenne muscular dystrophy
- Becker muscular dystrophy
- Nemaline myopathy
- Malignant hyperthermia
- Familial periodic paralysis
- Friedreich ataxia
- Kugelberg-Welander Syndrome
- Myotubular myopathy

***Connective tissue disorders***

- Marfan syndrome
- Ehler-Danlos syndrome
- Osteogenesis imperfecta
- Pseudoxanthoma elasticum

***Neonatal effects of maternal disorders***

- Thyrotoxic cardiomyopathy
- Lupus erythematosus
- Catecholamine cardiomyopathy

***Storage diseases***

- Glycogen storage diseases types II, III, IV
- Phosphorylase B kinase deficiency
- Lysosomal glycogen storage without acid maltase deficiency
- Mucopolysaccharidoses
- Mucolipidoses
- I cell disease
- Gangliosidosis: $GM_1$, types I and II
  $GM_2$, types I and II
- Lipid storage diseases
- Fabry disease
- Gaucher disease
- Neuronal ceroid lipofuscinosis
- Multisystem triglyceride storage disease
- Disseminated lipogranulomatosis (Farber disease)

***Disorders of metal and pigment metabolism***

- Neonatal iron storage disease
- Hemosiderosis and hemochromatosis
- Wilson disease
- Menkes kinky hair syndrome
- Dubin-Johnson syndrome

***Lipid disorders***

- Hyperlipoproteinemias
- Tangier disease

***Obstructive cardiomyopathy***

- Hypertrophic cardiomyopathy
- Infant of diabetic mother
- Hereditary HCM with mitochondrial myopathy of skeletal muscle and cataracts
- Leigh disease (subacute necrotozing encephalomyelopathy)

***MELAS = myopathy, encephalopathy, lactic acidosis, and stroke; MERRF = myopathy, encephalopathy, ragged red fibers; DCMP, dilated cardiomyopathy; HCM, hypertrophic cardiomyopathy***

## Mitrochondrial disorders

In mitrochondrial disorders, myocardial biopsy demonstrates an absolute increase in the number and size of mitochondria, while the activity of mitochondrial enzymes is decreased (6). The types of mitochondrial disorders are shown in Table 4.

## Defects in mitochontrial respiratory chain

Cardiac failure is the most common cause of death. Complex III deficiency is complicated by histiocytoid cardiomyopathy of infancy (7,8). This results from accumulation of abnormal Purkinje cells beneath the endocardium with severe arrhythmias.

**Table 3. Metabolic Cardiomyopathy with Myopathy.**

***Glycogen storage diseases***

- **Acid maltase deficiency**
  - **Infantile**
  - **Childhood onset**
- **Adult onset**
  - **PPL-b-K+**
  - **PPL (McArdle)**
  - **Debrancher**
  - **Brancher**
  - **PGK**
  - **PGAM-M**
  - **LDH-H**

***Disorders of lipid metabolism***

- **Systemic carnitine deficiency**
- **Carnitine palmitoyltransferase (CPT) deficiency**
- **Long-chain ACyl-CoA deydrogenase deficiency**
- **Multiple Acyl-CoA Dehydrogenase deficiency**

***Disorders of mitochondrial metabolism***

- **Complex I**
- **Complex II**
- **Complex III**
- **Complex IV**
- **Complex V**
- **Multiple respiratory chain defects**
  - **Dilated dominatly inherited**

***PPL-b-K, phosphorylase b kinase; PGK, phosphoglycerate kinase; PGAM-M, phosphoglycerate mutase, muscle subunit; LDH-H, lactate dehydrogenase, isoenzyme H; acyl-CoA, acyl co enzyme A***

## Primary hypertrophic cardiomyopathy

Primary hypertrophic cardiomyopathy is a disease of the myocardium with an incidence of more than 1 in 500 (9). Idiopathic hypertrophic subaortic stenosis (IHSS), hypertrophic obstructive cardiomyopathy, muscular subaortic stenosis, and asymmetric septal hypertrophy (ASH) are among its many synonyms. Although primary HCM has been described in stillborns, newborns and infants, it is rare in the first two decades of life.

The disease can be caused by a mutation in one of four genes that encode proteins of the cardiac sarcomere: the *B*-myosin heavy-chain on chromosome 14q1, cardiac troponin T on chromosome 1q3, *a*-tropomyosin on chromosome 15q2, and myosin-binding protein C genes on chromosome 11p13 (10-17,48).

### Clinical findings

This condition is characterized by a jerky pulse, palpable atrial beat, late systolic outflow tract murmur, and non-dilated left ventricle with disproportionate thickening of the ventricular septum. The echocardiogram may show three distinct patterns: asymmetric septal hypertrophy (60%), concentric left ventricular hypertrophy (LVH)(25%), and distal LVH at the apex (10%). In 5% of cases there are other patterns of LVH.

There may be a wide spectrum of clinical presentation in HCM, from severe cardiac failure in infancy to an incidential finding that may occur at any age.

The 12-lead EKG is normal in 25% of asymptomatic patients and in 5% of symptomatic patients, especially those who are young (19). At the time of diagnosis, 10% of patients are in atrial fibrillation, 20% have left-axis deviation, and 5% have a right bundle branch block pattern (18,19). The majority of patients have an intraventricular conduction delay, but complete left bundle branch block pattern is rare. ST-segment depression and T-wave changes of LVH and/or deep S waves in the anterior chest leads $V_1$ to $V_3$ (19). Occasionally, giant negative T waves are seen (20,21).

The annual mortality from sudden death is six percent in children and adolescents and approximately two percent in adults. Initial presentation with sudden death is not uncommon in the young (22).

Due to the asymmetric hypertrophy of the interventricular septum and the close proximity of the anterior mitral valve (AMV) leaflet with increased filling of the LV after exercise, the AMV leaflet slams shut against the bulging septum, as a result of a Venturi effect. The resultant obstruction to left ventricular outflow explains the death that may occur characteristicaly after exercise. This is particularly seen in high school and teenage athletes such as swimmers, football and basketball players.

Pathologically within the areas of affected myocardium, there is considerable interstitial fibrosis with gross disorganization of the muscle bundles resulting in a characteristic whorled pattern (23). Treatment is aimed at improving symptoms and preventing complications, especially sudden death. Beta-adrenoceptor blockers, particularly propranolol, and calcium antagonists such as verapamil, are the mainstay of pharmacologic therapy for both chest pain and dyspnea.

The available therapeutic options for the prevention of sudden death are amiodarone or the implantable cardioverter-defibrillator (24-26). Arrhythmias are a common complication of HCM, and supraventricular arrhythmias in particular are associated with embolic complications. Once atrial fibrillation is established, anticoagulants and digoxin with/without verapamil or *B*-blockers is appropriate treatment.

**Table 4. Types of Cardiomyopathy in Mitochondrial Disorders.**

| *Disorder* | *Type of Cardiomyopathy* |
|---|---|
| Cytochrome c-oxidase coenzyme deficiency | HCM |
| Cytochrome c-oxidase deficiency | HCM |
| Cytochrome c-oxidase deficiency with histiocytoid cardiomyopathy | HCM |
| X-linked cardiomyopathy with abnormal mitochondrial myopathy, granulocytopenia (Barth syndrome) | DCM |
| Hereditary HCM with mitochondrial myopathy of skeletal muscle, cataracts | HCM |
| HCM with Leigh disease (subacute necrotizing encephalomyelopathy) | HCM |

*HCM = hypertrophic cardiomyopathy; DCM = dilated cardiomyopathy*

## Conduction system disorders

Fetal dysrhythmias are usually transient. Most abnormal fetal rates and rhythms during labor are functional.

Fetal dysrhythmias may be associated with congenital heart disease or fetal hydrops. Bradycardia may be due to fetal distress; bradydysrhythmia is a manifestation of complete AV block or blocked atrial premature beats (27).

## Congenital heart block

Congenital heart block (CHB) may be present in normal hearts and in malformed hearts (28). Most cases are sporadic; CHB occurs in one in 20,000 live births (29). It may be a manifestation of neonatal lupus erythematosus (NLE).

CHB develops in utero, usually during the second trimester. The heart block, unlike the other manifestations, is permanent. About one quarter of infants with CHB in general have associated structural congenital cardiac anomalies, including ASD or VSD, transposition and anomalous venous drainage. Rarely, affected infants may have pericarditis, myocarditis, or a cardiomyopathy.

Due to the strong association of CHB with maternal lupus, every infant with CHB should have lab studies for anti-La (SS-B), anti-Ro (SS-A) and anti-$U_1$ RNP antibodies.

## Arrhythmogenic right ventricular dysplasia

Arrhythmogenic right ventricular dysplasia is an idiopathic cardiomyopathy (30), characterized pathologically by fatty infiltration of the right ventricular myocardium (30-36).

The incidence of this condition is unknown (32-40). At least 30 percent of cases are familial (30,33,35). The gene for this disease has been mapped to chromosome 14q23-q24. In a study of 60 cases of sudden death in young northern Italians, at least 20% had histological evidence of right ventricular dysplasia at autopsy (40).

Patients usually present in childhood or as young adults (31); 80% of the cases are apparent before the age of 40 years (32). Even though 10% of these patients are asymptomatic (30), they may present with palpitations, syncope, congestive heart failure, or even sudden death (30,31,38).

## Long QT syndrome

The long QT syndromes (LQTS) are a heterogenous group of disorders characterized by prolongation of the corrected QT interval (Qtc) on the surface electrocardiogram, seizures, syncope and sudden death. Mortality is presumably due to cerebral hypoperfusion during a malignant ventricular tachycardia known as *torsades de pointes.*

Two distinct forms of congenital LQTS have been described. The Romano-Ward LQTS is inherited in an autosomal pattern with no asociated phenotypic features. The Jervell & Lange-Nielson LQTS is associated with congenital sensorineural deafness, and follows autosomal recessive inheritance. The latter is associated with longer QT intervals and a worse prognosis.

As with hypertrophic cardiomyopathy, the long QT syndromes are a genetically and clinically heterogeneous group of disorders that share similar manifestations (41). Even though syncope and sudden death are usually associated with physical or emotional stress, some patients die in their sleep.

Schwartz et al (42) presented strong evidence of an association between SIDS and the long QT syndrome. Between 1976 and 1994, the authors remarkably were able to record electrocardiograms on the third or fourth day of life in 34,442 Italian newborns. They then followed these babies prospectively for one year, and during this period 34 of the children died; 24 of them from SIDS. The victims were found to have longer QT intervals (42).

## Evaluation of cardiomyopathy

In evaluating cardiomyopathy in children, a thorough investigation should be made for a metabolic disorder. Neuromuscular evaluation should be done in all patients with

congestive cardiomyopathy. Muscle biopsy and electromyography can be useful since sketetal muscle involvement in cardiomyopathy may be clinically silent and a myopathy not suspected.

Studies should include determination of serum iron and phosphate levels, muscle enzymes (especially lactate dehydrogenase and creatine phosphokinase with their isozymes), thyroid hormones and plasma carnitine. Trace metals and urinary amino acids, organic acids and catecholamines should be measured.

Coronary sinus flow studies and substrate extraction may define metabolic abnormalities in the cardiomyopathic heart (43). Endomyocardial biopsy affords a measure of direct assessment of cardiac tissue in characterizing cardiomyopathy (44).

The diagnostic approach to cardiomyopathies is shown in Table 5.

**Table 5. Diagnostic Approach to Cardiomyopathies.**

***Cardiologic investigations***
- **ECG**
- **Echocardiography**
- **Hemodynamic studies**

***Muscle biopsy***
- **Morphology (histochemistry, histoenzymology)**
- **Biochemistry**
- **Molecular genetics**

***Hematological tests (overnight fasting)***
- **Glucose**
- **Lactate (lactate/pyruvate ratio)**
- **Pryruvate**
- **Free fatty acids**
- **Ketone bodies (B-hydroxybutyrate/acetoacetate ratio)**

***Other investigations***
- **Creatine kinase**
- **Transaminases**
- **Plasma carnitine (total and free)**
- **Urine gas chromatography/mass spectorscopy for organic acids**
- **Fibroblast cultures for enzyme assays**

## Cardiomyopathy management

It is important that the underlying cause of myocardial dysfunction be defined. If secondary cardiomyopathy is present, such as in carnitine deficiency, pheochromocytoma, or hemosiderosis, specific therapy should be instituted. Routine therapy for congestive heart failure is relatively ineffective in primary metabolic disorders, and the inotropic effects of digitalis may be negligible (45).

Major complications of congestive cardiomyopathy are dysrhythmias and thromboembolism. Cautious, specific drug therapy and timely implantation of cardiac pacemakers may avoid sudden and unexpected death in children with dysrhythmias. Patients with atrial fibrillation or atrial standstill, with known or mural thrombi, or with a definite or probable history of thromboembolus should be given anticoagulants (46).

Intercurrent infections should be treated with appropropriate antibiotics, antipyretics, bed rest and oxygen. Radiofrequency ablation of a conduction defect may be an extremely effective treatment for dysrhythmias.

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***(Please contact the author for the other references listed in this article.)***

# Radioactive seed embolization to the lung following prostate brachytherapy

***JANE C. DAFOE-LAMBIE, R.N., B.S.N.***

***LAURIE J. ABEL, R.N., B.S.N., O.C.N.***

***HEATHER J. BLATT, R.N., B.S.N., O.C.N.***

***JEANNE A. FUSCARDO, R.N.***

***ROBIN L. STIPETICH, R.N., O.C.N.***

***JONATHAN H. LIEF, PH.D.***

***ANTHONY T. DORSEY, M.S.***

***WAYNE M. BUTLER, PH.D.***

***MARK L. BENSON, M.D.***

*Schiffler Oncology Center, Wheeling Hospital, Wheeling*

***GREGORY S. MERRICK, M.D.***

*Schiffler Oncology Center, Wheeling Hospital, Wheeling; The George Washington University Medical Center, Division of Radiation Oncology & Biophysics, Washington, D.C.*

## Abstract

***Over the past decade, prostate brachytherapy has been increasingly utilized as definitive management for early stage carcinoma of the prostate gland. One risk of the procedure is pulmonary seed embolization. In this article we report the incidence and timing of seed migration. Pulmonary embolization of radioactive seeds occurs in approximately 20% of patients undergoing prostate brachytherapy. To date, no acute or delayed detrimental effects have been reported which are attributable to the pulmonary embolization of the seeds; nevertheless, it is imperative that patients and health care providers be cognizant of this possible event.***

## Introduction

Currently, prostate brachytherapy, radical prostatectomy and external beam radiation therapy are widely accepted as potentially curative treatment options for early stage carcinoma of the prostate gland. In 1995, the American Cancer Society reported that prostate brachytherapy may offer men with localized disease a single, cost-effective, low-morbidity treatment with cure rates equivalent to radical prostatectomy or external beam radiation therapy (1).

The rebirth of prostate brachytherapy is due to advances in imaging capabilities, sophisticated treatment planning computers and the development of transrectal ultrasonography. The procedure is generally performed in an outpatient setting with a decreased incidence of urinary incontinence and less erectile dysfunction when compared to radical prostatectomy. In recent years, prostate brachytherapy procedures in the United States have increased from approximately 6,000 in 1995 to an estimated 40,000 in 1999.

One risk of prostate brachytherapy is pulmonary seed embolization. Until recently, the fixity (or retention) of radioactive seeds (i.e., palladium-103 and iodine-125) implanted in and around the prostate had not been well documented (2). Several investigators have reported the pulmonary seed embolization rate (3-7), but the exact mode and the timing of seed migration remains unclear. To date, no acute or delayed detrimental effects have been reported which are attributable to the pulmonary embolization of the seeds; nevertheless, it is imperative that all candidates for prostate brachytherapy and their health care providers be aware of the possibility of pulmonary seed embolization.

In this study, we report the incidence and timing of seed migration. Seed fixity in the area of the implant has been correlated with the incidence of pulmonary seed embolization (2).

## Methods

Our study population consisted of 175 consecutive patients who underwent prostate brachytherapy from September 1997 through January 1999 for clinical T1-T3a (1997 AJCC) carcinoma of the prostate gland. Table 1 summarizes the characteristics of the patients.

Due to significant variation in Gleason scoring, all cases originating from outside institutions were reviewed prior to formulation of the treatment plan (8). Ninety-five patients were implanted with iodine (I-125) and 80 patients with palladium (Pd-103); 102 patients (58.3%) received pre-implant external beam radiation (45Gy in 1.8Gy fractions utilizing high-energy photons delivered via a multiple field technique); and 73 patients (42%) received neoadjuvant hormonal manipulation due to urinary obstructive symptomatology or unfavorable geometry.

An average of 136 seeds were implanted per patient. Approximately 40% of both isotopes were implanted in the periprostatic region to ensure an adequate extra-capsular dose of radiation. Both seeds are 0.8 mm wide and 4.5 mm long. Iodine-125 is available as a free seed or as Rapid Strand™ (Nycomed-Amersham, Princeton, NJ) which are linked seeds spaced in a braided, stiffened vicryl suture and spaced 1 cm apart. Palladium-103 (Theragenics, Norcross, Ga.) is only available as a loose seed.

When iodine (I-125) was utilized, Rapid Strand™ was implanted in the periprostatic region and free I-125 seeds were utilized in the central aspect of the gland. There were no additional differences in preplanning or intra-operative technique for implantation of either radioisotope.

Post-implant PA and lateral chest X-rays were obtained from the first day through 15 months. We do not routinely obtain chest X-rays post-implant since the results do not alter

**Table 1. Patient Characteristics.**

| | I-125 (n = 95) | | Pd-103 (n = 80) | | Total (n = 175) | |
|---|---|---|---|---|---|---|
| | Mean | Range | Mean | Range | Mean | Range |
| Age (years) | 66.2 | 49 - 78 | 66.8 | 51 - 77 | 66.5 | 49 - 77 |
| Clinical stage | T2a | T1c - T2c | T2b | T1c - T3a | T2a | T1c - T3a |
| PSA (ng/mL) | 8.05 | 3.0 - 29 | 10.1 | 1.5 - 51 | 8.97 | 1.5 - 51 |
| Gleason score | 6.1 | 5 - 7 | 7.4 | 6 - 9 | 6.7 | 5 - 9 |
| AUA score | 5.58 | 0 - 26 | 5.47 | 0 - 16 | 5.53 | 0 - 26 |
| Ultrasound volume ($cm^3$) | 36.7 | 12 - 74 | 34.6 | 16 - 61 | 35.7 | 12 - 74 |
| Planning volume ($cm^3$) | 60.0 | 25 - 90 | 56.5 | 30 - 95 | 58.4 | 25 - 95 |

patient management. The last 20 patients in our series did have chest X-rays done within 14 days of implantation. Of the remaining 155 patients, 136 consented to a PA and lateral chest X-ray.

## Results

Seeds were visualized in the lungs of 21.8% (34/156) of these patients. The percentage of implanted seeds embolizing to the lung were 0.22% (53/23,805).

These findings are consistent with those of other investigators (3-7). None of the patient or treatment parameters evaluated, including patient age, clinical stage, transrectal ultrasound prostate volume, choice of isotope, the utilization of moderate external beam radiation or neoadjuvant hormonal manipulation, were statistically significant in determining the risk of pulmonary seed embolization.

No seeds were identified in the lungs in the 20 patients with chest films obtained within 14 days of their procedure. Seeds were visualized in 25% (34/135) of the remaining patients who had chest X-rays obtained more than 30 days post-implantation. The difference between the rate of pulmonary seed embolization for chest X-rays obtained less than 14 days following implantation and for those obtained 30 days or more post-implant was statistically significant ($p = 0.011$). Figure 1 illustrates a PA and lateral chest X-ray with a pulmonary seed.

When local seed loss (less than 2% at 6 months) is compared with the pulmonary embolization rate of 0.22%, approximately 10% of the seeds lost from the pelvis embolize to the lung (2). The percent of pulmonary seed embolization rates for each isotope was not statistically significant (0.18% for I-125, 0.28% for Pd-103). If the Rapid Strand™ seeds are not considered at risk of migration and embolization rates for free seeds are compared, the difference becomes significant (0.49% for I-125 vs. 0.28% for Pd-103, $p = 0.042$).

None of our patients reported acute respiratory symptoms such as dyspnea, tachypnea, productive cough or hemoptysis. No tachycardia, chest pain, low grade fever, pneumonitis or secondary malignancy related to pulmonary seed emboli during or after seed implantation were observed.

***Figure 1.*** **PA radiograph with a 4.5mm long I-125 seed visible in the right lower lobe. Only the 3mm long silver wire X-ray marker is clearly visible while the titanium seed encapsulation is obscured.**

***Figure 1a.*** **The same seed seen in lateral projection is foreshortened by viewing down the 0.8mm cylindrical axis of the seed.**

## Discussion

The prostate gland is surrounded by a dense venous plexus which drains into the iliac vessels, the inferior vena cava and eventually to the right side of the heart and the lungs. It is possible that a seed may migrate when placed in the lumen of the venous plexus.

A study by Tapen et al reported that implantation of linked seeds in the

**Table 2. Seed Embolization to the Lungs. *(Adapted from Merrick et al 2000)***

| Study (ref) | Merrick (2) | | | Tapen (3) | | | | Grimm (4) | Nag (5) | Nag (6) | Steinfield (7) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Isotope: | I-125 | Pd-103 | Overall | I-125 Rapid Strand | Loose I-125 | Pd-103 | Overall | I-125 & Pd-103 | Pd-103 | Pd-103 | I-125 |
| ***Patients with seed embolism*** | | | | | | | | | | | |
| Number | 18/84 | 16/72 | 34/156 | 1/143 | 1/10 | 15/136 | 17/289 | 39/221 | 19/107 | 6/30 | 1/5 |
| % | 21.4 | 22.2 | 21.8 | 0.07 | 10 | 11 | 5.9 | 17.6 | 17.8 | 20 | 20 |
| ***Seed embolism rate*** | | | | | | | | | | | |
| Number | 24/13,467 | 29/10,338 | 53/23,805 | | | | | | 32/10,612 | 7/3,213 | 5/600 |
| % | 0.18 | 0.28 | 0.22 | | | | | | 0.3 | 0.22 | 0.8 |

periphery of the prostate significantly reduced the incidence of radioactive pulmonary seed embolization (3). If linked seeds are not at risk of migrating, then the difference between the percent of iodine-free seed migration compared to palladium may be attributed to the different shape of these seeds. Even though both seeds are the same size, iodine seeds are smooth and rounded on each end while palladium seeds are sharply cupped. The cupped ends of the palladium seed may allow these seeds to adhere to tissue along the implant needle track (2).

The diagnosis of a major pulmonary embolism with resultant sudden onset of dyspnea, apprehension, tachypnea and tachycardia followed by anoxia of the obstructed vessel, ischemia and acidosis represents a potentially fatal medical emergency. Unlike this acute, generally thromboembolic stereotypic scenario, a review of the literature and our data indicate that pulmonary seed embolization is an asymptomatic event without consequence. It is doubtful that seed embolization to the lung would have any measurable effect on pulmonary function in light of the very short range of low energy both radioisotopes emit (3).

There have been no reports of symptomatic pulmonary dysfunction, including pneumonitis, and this risk is constrained by the relatively short half-lives of the isotopes: 17 days for Pd-103 and 60 days for I-125 (3-7). Secondary malignancies also have not been seen. To date, our results confirm these findings.

Our data for pulmonary seed embolization rates is comparable with other published reports (3-7)(Table 2). The study previously mentioned by Tapen et al (3) reported a lower pulmonary seed embolization rate, but all their chest X-rays were obtained the day following implantation and consisted of a PA film without a lateral projection. Merrick et al (2) reported that 10%-15% of patients with pulmonary seeds would go undiagnosed without a lateral view. Seeds in the anterior medial basilar segment of the left lower lobe or the medial basilar segment of the right lower lobe can potentially be obscured in the PA view. Nag et al (5,6) suggested that seed migration occurs within the first month and probably on the day after brachytherapy.

Our study, however, indicates that pulmonary seed embolization occurs later than previously hypothesized. No pulmonary seeds were detected on any chest X-ray obtained within 14 days of implantation, but 25% of chest X-rays taken more than 30 days following implantation were positive for seeds ($p = 0.011$). Merrick et al (2) showed seed loss from the prostate bed was rare after 28 days. As such, it appears that pulmonary seed embolization may most likely occur between day 14 and day 28 post-implant.

## Conclusion

Pulmonary embolization of radioactive seeds occurs in approximately 20% of patients undergoing prostate brachytherapy. Seed migration appears to occur between day 14 and day 28 after the procedure. None of the patients in our study nor any patients reported in the medical literature have developed any associated morbidity or mortality.

As prostate brachytherapy continues to assume an increasing role in the management of early stage prostate cancer, it is imperative that patients and health care providers be aware of this insignificant but common occurrence as a result of this procedure.

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William C Morgan, Jr., M.D.

Otologist. Diplomat American Board of Otolaryngology. FACS
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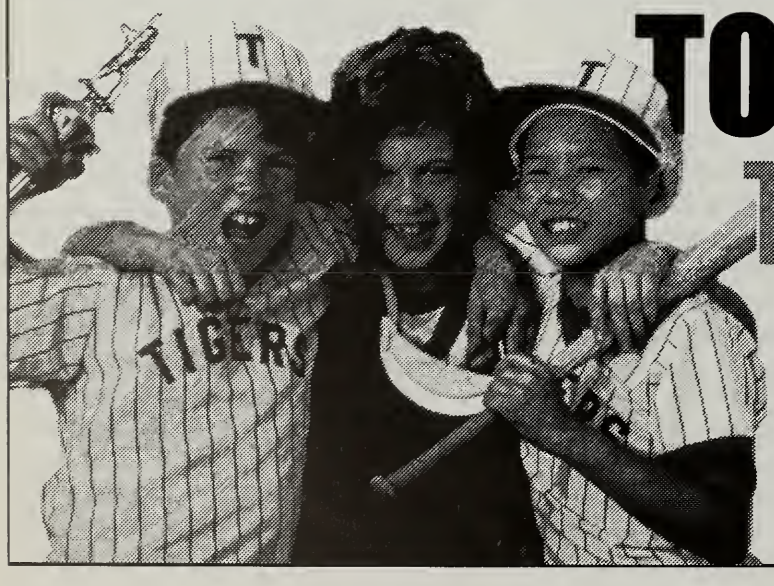


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# Adolescent all-terrain vehicle deaths in West Virginia, 1990-1998

***JAMES C. HELMKAMP, Ph.D.***
*Center for Rural Emergency Medicine, West Virginia University, Morgantown*

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## Abstract

***West Virginia had the third highest number of ATV-related deaths and the highest death rate among all states from 1990-98. Adolescents were identified as a particularly high-risk ATV user group. Fatality data from the U.S. Consumer Product Safety Commission indicated that one-quarter (25 of 101) of the state's ATV-related deaths occurred among children 16 and younger. Only one victim was wearing a helmet at the time of their fatal crash and nearly 70% of the victims were males. The average years of potential life lost was 64.2. WV's adolescent death rate of 0.67 per 100,000 was 5 times higher than the national rate. Young ATV drivers exacerbate the inherent dangers associated with ATVs through poor judgment and risk-taking. Health care providers should utilize "teachable moments" to emphasize ATV safety to their young patients and their parents, but more importantly, adults must become role models by embracing and teaching practical preventive measures.***

## Introduction

Since the introduction of all-terrain vehicles (ATVs) in the United States in the early 1970s, thousands of deaths and hundreds of thousands of injuries have resulted from a variety of recreational and occupational activities. U.S. Consumer Product Safety Commission (CPSC) data indicate that between 35% and 40% of ATV-related deaths and injuries occur in children 16 years of age or younger, confirming that adolescents are particularly vulnerable to severe and often fatal injuries (1,2).

Over the past 10 to 15 years, many studies have reviewed ATV-related injury and fatality data from a variety of perspectives. These perspectives include youth safety behaviors (3-5), hospital/ED-based case series (6-20), effectiveness of helmets and risk of injury and death (1,21), population-based/regional studies (9,20, 22-27), analysis of the marketing and regulation of ATVs (28-30), pediatric injury and death (10-15,17-19,22), and elderly death (31).

Four articles have described injuries and death resulting from ATV crashes in West Virginia. Vasilakis et al (20) studied 28 admissions, including three deaths, to a Level I trauma center from September 1985 to July 1986. One-third of these patients were under age 16. Lister and colleagues (22) described the injury experience of 218 children under age 16 who were injured in ATV crashes from 1991 through 1995 and admitted to trauma centers serving the state. Four of these children later died.

More recently, a comprehensive review of CPSC ATV death files from 1985 through 1998 described all WV ATV-related deaths and in subpopulations including the elderly (23,31). CPSC data for 1990 through 1998 show that West Virginia had 101 ATV-related deaths, ranking third among all states (PA - 115, CA - 104)(1), while experiencing the highest fatality rate nationwide (WV - 0.65 deaths per 100,000, United States - 0.09).

The purpose of this research is to describe the characteristics of children who were killed in ATV crashes in West Virginia during the nine-year period from 1990-1998, compare death rates with national statistics, and re-emphasize preventive measures.

## Methods

CPSC ATV-related fatality information from 1985 through 1997 was reviewed to identify deaths of children 16 years of age or younger (23). Preliminary ATV-related fatality data reported for WV in 1998 was verified with the CPSC Directorate for Epidemiology and Health Sciences and included in this study (1).

CPSC methodology for defining "in scope" ATV-related deaths is described elsewhere (2,23). Victims of fatal ATV crashes are described in terms of age, gender, use of helmets, position of victim on ATV and trauma site. Death rates per 100,000 were calculated using 1990 census data (32). The mean years of potential life lost (YPLL) per fatal victim was calculated using a standard age of 75 years.

## Results

One-quarter (25 of 101) of the ATV-related deaths in West Virginia during the nine-year period 1990 through 1998 occurred in children 16 years of age or younger. The average age of these children was 10.8 years (11.2 years for males and 9.9 years for females); seven were under the age of 10, and the youngest was an 18-month-old girl.

Eight of the children in these fatal accidents were passengers on an ATV (5 females and 3 males), while the remaining 17 were driving the ATV at the time of their incidents. One of these drivers was a 6-year-old boy. YPLL was similar for both boys and girls, 63.8 and 65.1 years, respectively.

Only one of the children who died was known to be wearing a helmet. All of the ATVs involved were 4-wheelers.

Eighty percent of the fatal injuries were in the head, neck, and spinal region. Nine of the 25 deaths occurred in 1997 with at least one death occurring each year, except in 1994 when no ATV-related deaths were recorded. Eighty-eight percent of the fatal incidents occurred Friday through Monday with 44% on Saturday and Sunday, 20% on Friday, and 24% on Monday.

Table 1 provides additional characteristics of these ATV-related deaths. The death rate for ATV-related deaths among children was 0.67 deaths per 100,000 population and slightly higher than the rate for the remainder of the population (Table 2).

**Table 1. Characteristics of ATV-related deaths in WV adolescents, 1990-1998, N = 25.**

| | | Number | % |
|---|---|---|---|
| **Gender:** | **Male** | **17** | **68** |
| | **Female** | **8** | **32** |
| **Age:** | **< 6 years** | **4** | **16** |
| | **6 - 9 years** | **3** | **12** |
| | **10-12 years** | **8** | **32** |
| | **13-16 years** | **10** | **40** |
| **Helmet Use:** | **Yes** | **1** | **4** |
| | **No** | **20** | **80** |
| | **Unknown** | **4** | **16** |
| **Trauma Site:** | **Head** | **17** | **68** |
| | **Abdomen/chest** | **4** | **16** |
| | **Neck/spine** | **3** | **12** |
| | **Unknown** | **1** | **4** |
| **Alchol Use:** | **Yes** | **1⁺** | **4** |
| | **No/not reported** | **24** | **96** |
| **Position of Victim:** | **Driver** | **8** | **32** |
| | **Passenger** | **17** | **68** |

***⁺Driver of 2nd vehicle involved in fatal incident had been using alcohol.***

**Table 2. ATV-Related Death Rates, 1990-1998.**

| | Population-based* (per 100,000) Death Rates⁺ | | |
|---|---|---|---|
| | **≤ 16 (No.)** | **17-79 (No.)** | **All Ages (No.)** |
| **WV** | **0.67 (25)** | **0.65 (76)** | **0.65 (101)** |
| **U.S.** | **0.13 (665)** | **0.07 (1,183)** | **0.09 (1,848)** |

****1990 U.S. Census***
***⁺CPSC reported ATV-related deaths***

## Discussion

ATV-related deaths among WV youth were similar to the data reported in other studies. These studies highlighted the nature and severity of injuries and common risk factors associated with operating ATVs (10-20) and safety behavior of adolescents with regard to ATV use (2-5).

Although the focus of each of these studies was somewhat different, a common theme was apparent — young, immature ATV drivers exacerbate the inherent dangers associated with ATVs through poor judgment and risk-taking. Children often do not possess the physical size, strength, coordination, and maturity to properly operate an ATV, particularly adult-sized ATVs (over 90cc engine size) which may weigh up to a quarter of a ton. Youth also often do not physically "fit" many of the adult ATVs they operate; arm length to reach grip throttles and leg and foot length for breaking and shifting are often compromised.

The 1997 CPSC national survey on ATV injury reported the average engine size for injured youth < 12 yrs. was about 210cc, about 255cc for youth 12-15 yrs., and about 261cc for riders 25 yrs. of age and older (2). Engine size information for fatal ATV crashes in WV was not consistently available from CPSC data files.

While ATV death rates in WV adolescents and adults were about the same, the rate in U.S. youth was double the rate for adults, 0.13 and 0.07 deaths per 100,000 population, respectively. The rate among WV youth was five times higher than the U.S. rate for youth, 0.67 and 0.13, respectively; the rate differential jumps to nine when comparing the adult rates (Table 2). Rates based on a small population such as in WV can fluctuate quite a bit with a very small change in the number of deaths.

The lack of the use of helmets by ATV riders and the severity of injuries resulting from ATV crashes is of critical importance. The CPSC examined 149 ATV fatalities and observed that 69% of drivers were not wearing a helmet at

the time of their crash. Head injuries were the cause of death in nearly 70% of these fatalities (21). The CPSC analytical review further indicated that helmet use reduces the risk of death by about 42% and could reduce the likelihood that a given non-fatal injury involves the head by about 64% (21).

In West Virginia, head or neck injury was listed as the cause of death for 80% of the youth fatalities, and all but one of these youths were wearing a helmet. The helmet worn by the 15-year-old boy when his ATV collided with a truck on a public roadway was forced off his head on impact; he died of massive head injuries. An ATV use survey conducted by the Nebraska Dept. of Health Farm Safety Coordinator noted that 77% of the 251 respondents (primarily youth) indicated they never used helmets (5), while respondents to a national CPSC survey stated that 36% of youth rarely or never wore helmets (2).

The CPSC data reviewed for this study provided very little information about driver experience. A recent survey of ATV safety in Indiana youth indicated that the most common sources of ATV training for children was a friend (27%) or the operator's father (22%); only 1% of youth ATV drivers said that they were taught by a certified professional ATV instructor (2,3). Like the youth in Indiana, many of the younger ATV drivers killed in WV most likely had little or no formal training and limited ATV experience. The ATV Safety Institute (ASI) indicates that approximately 1,200 training courses have been conducted in WV from 1995 through June 1999 with an average of four to five persons attending each course, most being adults (33).

## Limitations of data

In a summary report on ATV-related deaths from 1985 through 1996, the CPSC indicated that the actual number of deaths nationwide is probably 15% to 20% higher than the total officially reported (2). Thus, the number of deaths reported to the CPSC, collectively and for WV specifically, represent a minimum count, and the rates presented in this article are likely lower than the true rates.

The accuracy of ATV-related injury data in the state trauma registry is also problematic. During the same nine-year period, 134 injuries were identified among adolescents resulting from ATV crashes. This likely reflects significant under-reporting. In addition, injury coding of medical records is not uniform, not all hospitals within the state routinely submit data to the registry, and reporting of ATV incidents by local and state police agencies is sometimes incomplete and inaccurate. ATV incidents are often reported as motor vehicle traffic accidents or other road vehicle accidents without mentioning that an ATV was involved.

## Prevention strategies

It is imperative that manufacturers' safety guidelines, awareness of product hazards, and basic training be re-emphasized, brought to the public's attention, and made accessible and available to <u>all</u> ATV drivers.

ATV drivers should also be matched with machines that are appropriate for their age and experience. The CPSC and the Specialty Vehicle Institute of America continue to recommend the hands-on ATV RiderCourse, which offers students an opportunity to increase their safety knowledge and to practice basic riding skills under direct supervision of a licensed instructor (34,35). *(For the ATV RiderCourse nearest you, call 800-887-2887; for questions about ATV safety, call the ATV Safety Hotline at 800-852-5344 or the CPSC at 800-638-2772.)*

Health care professionals, including pediatricians, emergency medicine, and family practice physicians, should become more pro-active and routinely incorporate preventive care in their screening routines. They should utilize "teachable moments" to emphasize ATV and recreational safety issues to their young patients and their parents.

**Parents must stress that ATV riding can be fun and safe if basic safety guidelines are followed by all users, including themselves. Adults must assume responsibility and set an example for safe riding.**

## Conclusion

The Centers for Disease Control and Prevention (23) and the CPSC (34) recommend the following practical prevention strategies:

- Never operate ATVs without proper training or instruction
- Never carry passengers
- Never ride on public roads
- Never operate ATVs while under the influence of alcohol and/or drugs
- Always wear an approved helmet and other protective gear
- Only operate ATVs properly fit for age, size, ability, and experience

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***(Please contact author for the other references listed in this article.)***

# Pulmonary epitheloid hemangioendothelioma: A peculiar rare tumor of vascular origin

***CHINMAY K. DATTA, M.D., Ph.D***
*Pathologist*

***SAAD MOSSALLATI, M.D.***
*Thoracic and Vascular Surgeon*

***DAVID R. HESS, M.D.***
*Family Practitioner*

***PAUL M. BRAGER, M.D.***
*Oncologist*

***IMAD S. BASHA, M.D., F.C.C.P., F.A.C.P.***
*Pulmonologist*

*United Hospital Center, Clarksburg*

## Abstract

***An extremely rare case of pulmonary epitheloid hemangioendothelioma (PEH), previously known as intravascular bronchoalveolar tumor (IVBAT), in a 38-year-old female is presented. This patient had a history of rheumatoid arthritis and bilateral multiple small pulmonary nodules which progressed over the years. The histopathological diagnosis of PEH was confirmed by immunohistochemical stains. Prognosis of this tumor is very unpredictable. There is no effective treatment for pulmonary epitheloid hemangioendothelioma.***

## Introduction

PEH, originally thought to represent an IVBAT, is a peculiar tumor of vascular endothelial cell origin. It was first reported by Wells and Whimster (1) in 1969, when they described nine cases of an unusual pulmonary tumor of vascular origin rich in inflammatory cells and presence of prominent endothelial cells. Subsequently, Wilson et al (2) and Reed and Tarazakis (3) described the same tumor with the presence of epitheloid endothelial cells.

This tumor has also been known by other names such as sclerosing interstitial vascular sarcoma (4), sclerosing intravascular bronchoalveolar tumor (5), sclerosing angiogenic tumor (6), sclerosing endothelial tumor (7), pulmonary deciduosis (8) and chondrosarcoma (9). However, it was Dail and Liebow (4) in 1975 who classified this tumor as intravascular bronchoalveolar tumor (IVBAT). Subsequent immunohistochemical and ultrastructural studies established this peculiar tumor as pulmonary analogue of epitheloid hemangioendothelioma of the soft tissue (10).

Weiss and Enzinger suggested the term "epitheloid hemangioendothelioma" in 1982 and it has now been accepted as the family and systemic name of this tumor. This article presents a rare case of bilateral PEH and discusses etiology, diagnosis, differential diagnosis, prognosis, and treatment.

## Case report

A 38-year-old female began experiencing pain in her knees, hips and shoulders in 1992. She was diagnosed as having rheumatoid arthritis and underwent treatment.

The next year she underwent an abdominal hysterectomy and had no other major health problems until 1996, when a routine chest X-ray showed a few small nodules in both lungs which were thought to be rheumatoid nodules. She had been a half pack a day smoker for nearly 20 years. A repeat chest X-ray in October 1998, showed numerous small pulmonary nodules. All lab studies were within normal limits. Extensive radiological studies showed no lesions in any other organs.

An open lung biopsy was then performed in November 1998.

## Results

Gross pathological examination of the open biopsy specimen of lung revealed multiple fairly well-demarcated greyish nodules in the lung parenchyma measuring from 0.5 cm to 1 cm in diameter. On cut section, the nodules were firm with rubbery consistency.

Microscopically, the air spaces at the periphery of the nodules were filled with epitheloid endothelial cells (Figures 1 and 2 ). The cells were polyhedral with compact ground-glass cytoplasm, round to oval nuclei diffuse chromatin but with intranuclear inclusions (Figure 2). Cytoplasmic vacuoles containing red blood cells were also identified (Figure 3).

In the centers of the nodules, coagulative necroses (Figure 1), basophilic to eosinophilic matrix and focal calcifications are seen. The matrix materials are reminiscent of those seen in pleomorhpic adenoma of salivary gland.
Immunohistochemical stains are positive for factor VIII-related antigens (Figure 4) and CD34 but negative for cytokeratin, lymphocytic common antigen (LCA), S-100, HMB-45 and mucicarmine which eliminate carcinoma, unusual form of malignant lymphoma, or melanoma.

## Discussion

PEH is an unusual neoplasm that usually presents as multiple small nodules in lung parenchyma less than 2 cm in diameter. Ultrastructural and immunohistochemical studies first suggested its endothelial origin (7).

**Figure 1. Tumor showing necrosis (double arrows) and epitheloid cells at the periphery (single arrows).**

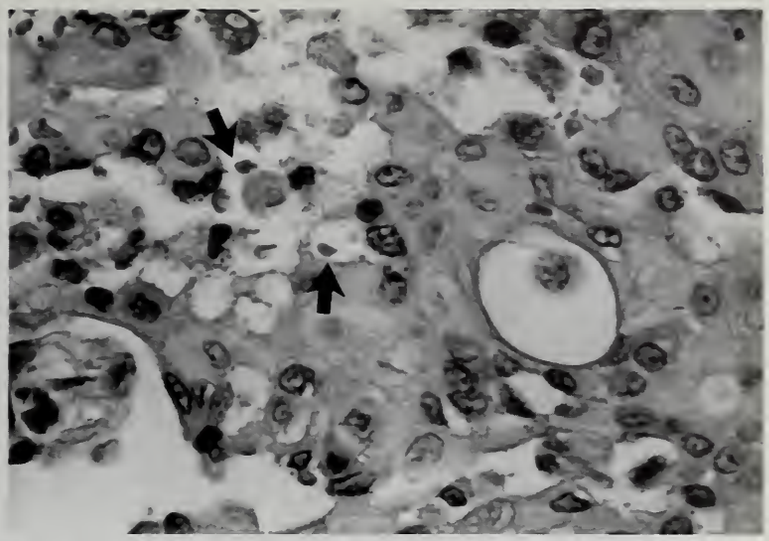

**Figure 3. Epitheloid endothelial cells showing cytoplasmic vacuoles containing red blood cells.**

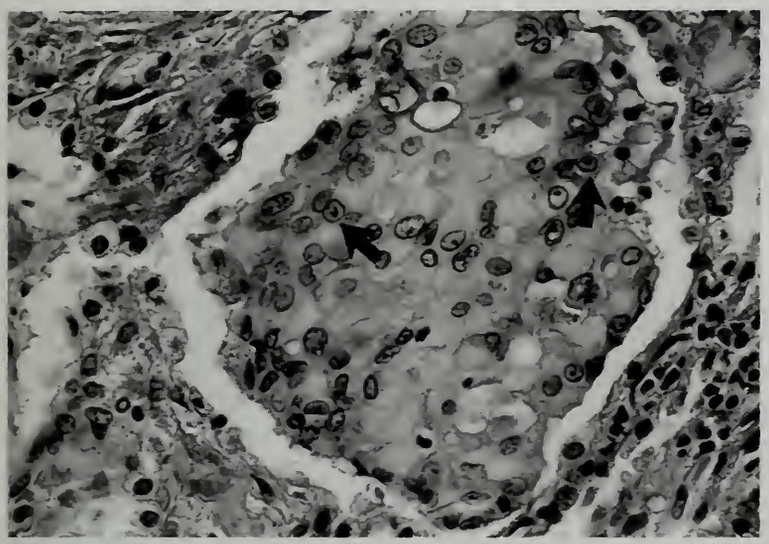

**Figure 2. PEH showing intranuclear inclusions (arrows) in polyhedral cells.**

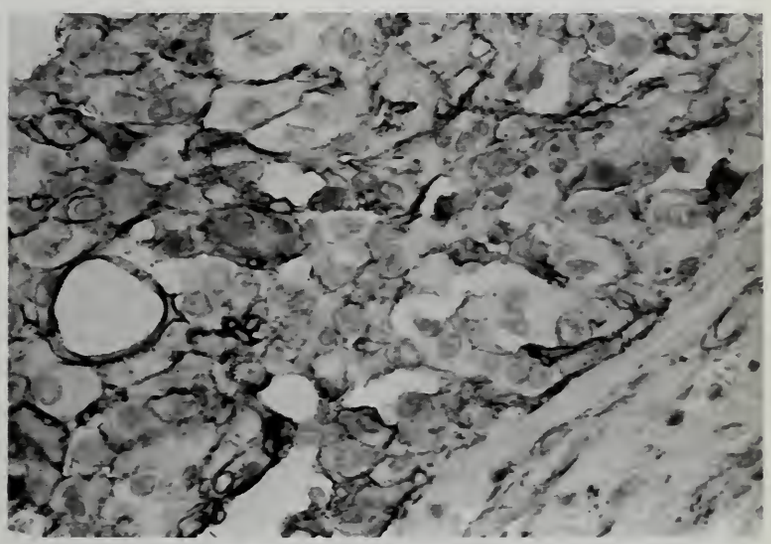

**Figure 4. Tumor cells showing positive stain for factor VIII-related antigen (immunohistochemical stain.)**

In 1975, Dail and Liebow (4) named this tumor IVBAT. However, this term was discarded and changed to epitheloid hemangioendothelioma by Weiss and Enzinger in 1982 (5).

Four out five cases occur in women and 50% diagnosed before age 40. Occasionally, this tumor can present as a solitary pulmonary mass as reported by Dail et al (8). This neoplasm can spread by retrograde extension into terminal bronchioles. It can grow in a peculiar fashion by extending from alveolus to alveolus through pores of Kohn. Vascular spread is present in most lesions. Lymphatic spread has also been identified. Dail stated that distant metastasis can occur in other organs (8); however, this finding was contradicted in many other published cases. Dail also suggested involvement of multiple organs concurrently (8).

PEHs can be classified as low- and high-grade lesions. In low-grade lesions, nuclei are bland appearing and mitosis is very rare as in our case. In high-grade lesions, pleomorphism of the nuclei and many mitotic activities are evident.

Prognosis of this tumor is very unpredictable. Dail et al (9) reported two cases with identical histological features; one patient lived 15 years and the other patient died within two years. Patients with extensive intravascular, endobronchial, pleural spread, and distant liver nodules had a very poor prognosis (9). Due to the scarcity of mitosis and nuclear pleomorphism, these factors are not predictable for prognosis (9).

In differential diagnosis of this tumor, adenocarcinoma, metastatic sarcomas such as leiomyosarcoma, chondrosarcoma, or osteosarcoma, and sclerosing hemangioma are considered (9). However, immunohistochemical stains with factor VIII-related antigen and CD34 will eliminate all these tumors.

As discussed by Dail et al (8), there are currently no effective therapies for PEH. Radiation and multiple chemotherapeutic agents have been tried with some patients, but with no effect. Dail (9) recommended no therapy for this tumor in asymptomatic patients. Attempts have been made to treat symptomatic patients, but unfortunately by the time symptoms are present, this neoplasm has already progressed to a terminal stage.

## Conclusion

This article describes a rare case of bilateral pulmonary epitheloid hemangioendothelioma along with a review of the literature. Proper diagnosis can be made by histological and immunohistochemical studies.

The prognosis of this neoplasm is very unpredictable and there is no proper therapy available as of today.

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# West Virginia Chapter — American College of Surgeons

## Annual Spring Meeting

**May 4-6, 2000**

The Greenbrier®
WHITE SULPHUR SPRINGS
WEST VIRGINIA 24986

Guest speakers:

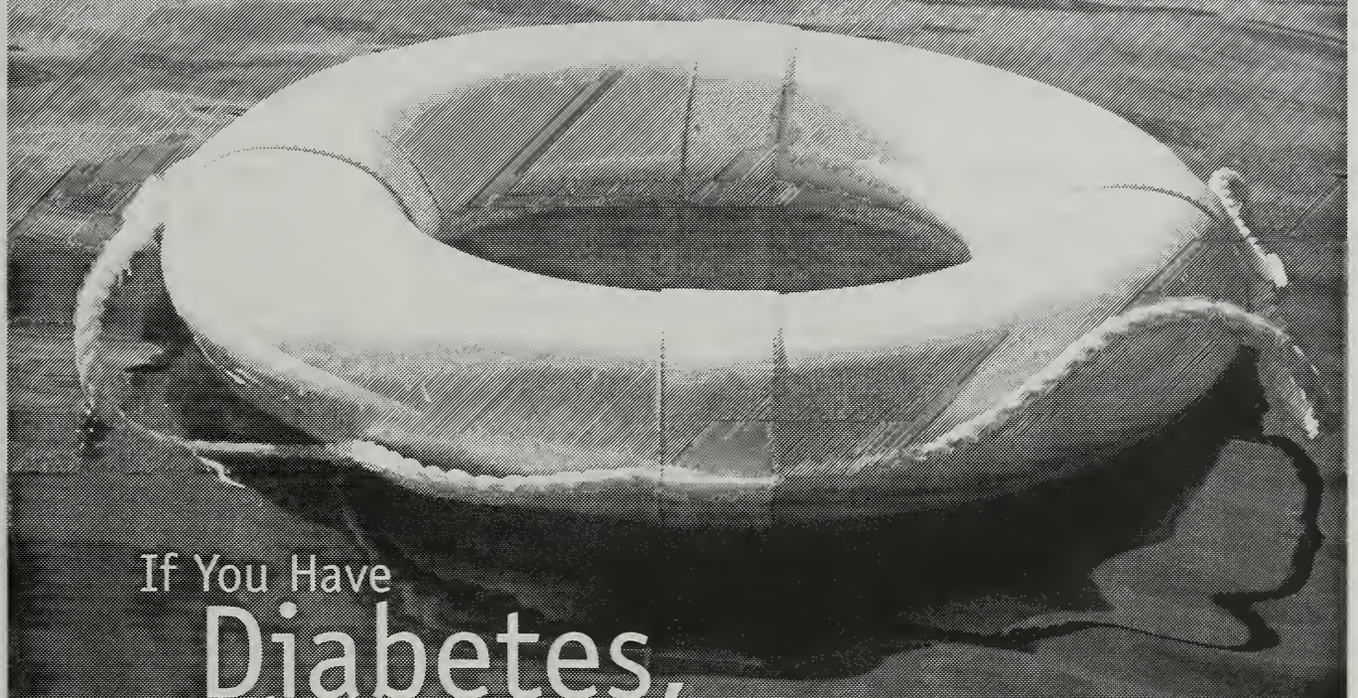
*Gerald L. Andriole, M.D.*
Professor, Division of Urologic Surgery, Washington UIniversity, St. Louis, Missouri

*Harvey W. Bender, Jr., M.D., F.A.C.S.*
Chair, ACS Board of Governors; Professor and Chair, Department of Cardiac & Thoracic Surgery, The Vanderbilt Clinic, Nashville, Tennesse

*Charles E. Cox, M.D., F.A.C.S.*
Professor of Surgery, University of S. Flordia College of Medicine; Program Leader, Comprehensive Breast Cancer Program; H. Lee Moffitt Cancer Center and Research Insitute, Tampa Flordia

Speakers from the West Virginia Chapter and residents from WV training programs will complete the program. The 50th Reception & Dinner will be Thursday, the golf tournament and reception Friday. There will be a $100 registration fee and 10.5 CME hours are available. For more information, contact Sharon Bartholomew at (304) 598-2802.
For room reservations, contact The Greenbrier at (800) 624-6070.

# What Do A Life Preserver And A Flu Shot Have In Common?



## If You Have Diabetes, Ask Your Doctor.

If you live with diabetes, you're more likely to die with the flu. Just ask the families of the 30,000 people with diabetes who died of flu or pneumonia complications. Then ask your doctor for a life-saving flu shot for you and those closest to you, and about the other risks you face when you face diabetes. Because with diabetes, ***prevention is control***, and control is your life line.

This message is brought to you by CDC and your health department.

# WVSMA Annual Business Meeting moved to Charleston to increase member involvement

To facilitate greater opportunity for all members throughout the state to be involved in the work and decisions of the WVSMA, the 2000 WVSMA Annual Business Meeting will take place in Charleston at the Embassy Suites from April 14-16. Traditionally, the Annual Business Meeting has been conducted at The Greenbrier in August, and plans are being discussed to hold future business meetings at different locations around West Virginia.

This year's meeting will feature the two sessions of the House of Delegates, an Executive Committee meeting, a Council meeting and dinner, a Legislative Wrap-up, awards presentations, a WESPAC meeting, specialty meetings and a reception. A preliminary agenda for the meeting is published below.

To register or obtain more information, please phone the WVSMA at (304) 925-0342 or 1-800-257-4747. Make plans now to attend!

Friday, April 14

| | |
|---|---|
| 4 p.m. | Legislative Wrap-up |
| 5:30 p.m. | WVSMA Executive Committee Business Meeting |
| 7:00 p.m. | WVSMA Council Business Meeting/Dinner |

Saturday, April 15

| | |
|---|---|
| 8 - 9 a.m. | Delegate Registration |
| 9:15 - noon | **First Session of the WVSMA House of Delegates**<br>*Introductions & Recognitions*<br>*2000 WVSMA Award Presentations*<br>*Constitution and By-Laws Committee Report*<br>*Nomination's Committee Report*<br>*Announcement of 2000-2001 Candidates for Office*<br>*Introduction of Resolutions* |
| 1 p.m. | Resolutions Committee Meeting Open/Closed |
| 2 p.m. | Medical Education Committee Meeting |
| 2 p.m. | Specialty Meetings<br>*Various chapters of West Virginia Specialty Societies will be scheduled for business meetings. Times and locations will be noted at a later date in the official program.* |
| 3:30 p.m. | Scientific & Educational Sessions Committee Meeting |
| 4:30 p.m. | WESPAC Meeting |
| 6:30 p.m. | Reception |

Sunday, April 16

| | |
|---|---|
| 8 - 9 a.m. | Delegate Voting and Registration |
| 9:15 a.m. | **Second Session of the WVSMA House of Delegates**<br>*Reaffirmation*<br>*Necrology Report*<br>*WVSMA Alliance President's Report*<br>*Announcement of Election Results*<br>*Constitution and By-Laws Report*<br>*Resolution Committee's Report* |

# Be a part of White Coat Day

It's not to late to join your fellow physicians for White Coat Day at the Legislature which will feature two special days of events on Feb. 20 and 21.

The schedule starts Sunday, Feb. 20 at 6:30 p.m. with a presentation entitled *"Lobbying the Legislature"* which will take place at the the Embassy Suites Hotel in Charleston. This briefing will be presented by WVSMA staff members to prepare physicians for their visit to the State Capitol the following day.

On Monday, Feb. 21, a breakfast and briefing with key legislative leaders will be conducted at 8 a.m. and then physicians will depart for the State Capitol at 10 a.m. Once they arrrive at the State Capitol, physicians will observe the House of Delegates and Senate Sessions and meet with legislators until 3 p.m.

Physicians are encouraged to wear their white coats and bring their spouse, office manager or anyone who is concerned about patient/physician issues. To obtain more information or register, phone the WVSMA at (304) 925-0342.

# *WV Academy of Ophthalmology National Spring Meeting planned for April 28-30*

The WV Academy of Opthalmology's 53rd Annual National Spring Meeting will be held April 28-30 at The Greenbrier in White Sulphur Springs.

Featured speakers include: John Linberg, M.D., Jack T. Holladay, M.D. and Thom Zimmerman, M.D. Topics to be discussed include ophthalmic plastic surgery, glaucoma, cataracts, cornea and refractive surgery.

The WV Academy of Ophthalmology is accredited by the WVSMA to sponsor CME for physicians. This CME activity has been designated for 15 credit hours in Category 1.

For further information, contact the WV Academy of Ophthalmology, P.O. Box 2982, Charleston, WV 25330-2982; (304) 342-5842; e-mail: nstonkin@citynet.net.

# Dr. Jerry Maliska honored by AAFP

Jerry A. Maliska, M.D., a family physician from Dunbar who has been a member of the WVSMA since 1971, was recently honored for 30 years of membership in the American Academy of Family Physicians.

The AAFP recognizes Dr. Maliska and pays tribute to those Academy members whose many years of involvement have contributed significantly to the position of prominence family physicians occupy in today's health care delivery system.

The AAFP, founded in 1947, was instrumental in creating the medical specialty of family practice in 1969, and today it represents more than 88,000 family physicians, FP residents and med students. The AAFP was a pioneer in establishing a requirement that its members earn 150 hours of approved CME every three years.

# *WVAAFP's 48th Annual Assembly set for April 7-9*

The West Virginia Academy of Family Physicians will conduct its 48th Annual Scientific Assembly, April 7-9, at the Charleston House Holiday Inn in Charleston.

This year's meeting has been approved for 23.75 AAFP prescribed credits, and a wide variety of scientific sessions are planned, as well as business events, social activities and exhibits.

To register or obtain more information, please contact the WVAAFP at (304) 776-7610.

# WVU, WV Urologic Society schedule annual update

West Virginia University and the West Virginia Urological Society will present their *Annual Update in Urology* in Morgantown from March 24-25.

Speakers for the meeting will include Ed McGuire of the University of Michigan and Durwood Neal of Southern Illinois University.

For details, contact Kathy Keener at (304) 293-2706.

# Anatomy course set for March 6-10

The Alton D. Brashear Postgraduate Course in Head & Neck Anatomy at Virginia Commonwealth University School of Medicine in Richmond will take place this year, March 6-10.

The primary teaching method is the dissection of the head and neck. Lectures, demonstrations and audiovisuals demonstrating specific anatomical relationships of organs and organ systems, will augment the laboratory dissections. The course is open to individuals with either an M.D., D.D.S., or Ph.D. degree or equivalent. It is approved for 44 credit hours by the Academy of General Dentistry.

For more details, phone Dr. Hugo R. Seibel at (804) 828-9791.

# CME & Special Events

## Camcare Health Educ. & Research Institute

***"Evaluation and Therapy for Swallowing Disorders"***
March 1, 12:15 p.m., Peter Americo, M.S., C.C.C., S.L.P., Montgomery General Hospital, Montgomery

***"Update on Blood and Blood Product Transfusion"***
March 1, Mary B. Taylor, M.D., (Fayette Co. Medical Society), Plateau Medical Center, Oak Hill

***"Issues in Medical Ethics Basic Certificate Program"***
March 3, 8 a.m. - 4:30 p.m., Mary Lou Lewis, M.D., Robert Hall, Ph.D., (Program Chairmen), Robert C. Byrd HSC, Charleston Division

***"Evaluation and Therapy for Swallowing Disorders"***
March 15, 6 p.m., Peter Americo, M.S., C.C.C., S.L.P., Man ARH, Man

***"Food-Borne Disease"***
March 22, 11:45 a.m., Donald M. Rosenberg, M.D., Summers Co. ARH, Hinton

***"27th Annual Newborn Day"***
March 24, 8 a.m. - 4:30 p.m., Stephan R. Maxwell, M.D., *(Program Chairman)*, Robert C. Byrd HSC of WVU, Charleston Division

## Huntington Medical Education Foundation

***"End of an Era: Antibiotics and Microbial Resistance"***
Feb. 22, 6 p.m., Thomas Rushton, M.D., *(Tri-County Medical Society)*, Paul B. Hall Regional Medical Center Annex Building

***"OIG Work Plan for 2000"***
Feb. 24, noon, Katrina Vega, Genesis Compliance Officer, Pleasant Valley Hospital, Point Pleasant

***"Current Management of Type 2 Diabetes Mellitus" & "Diabetic Foot Care and Wound Management"***
Feb. 24, 6:30 p.m., William Jennings, M.D., and Jeff Shook, D.P.M., *(Lawrence Co. Medical Society)*, Grandview Inn, Southpoint, Ohio

***"Emergency Medical Treatment and Active Labor Act"***
March 3, noon, Hoyt Burdick, M.D., and Paul E. Smith, J.D., Holzer Medical Center, Gallipolis, Ohio

***"Trends in Congenital Heart Surgery"***
March 15, 6 p.m., Dennis Moritz, M.D., Appalachian Regional Hospital, South Williamson, Ky.

***"Advances in Cancer and Non-Cancer Pain Management"***
March 16, 6 p.m., Timothy R. Deer, M.D., *(Mason Co. Medical Society)*, Pleasant Valley Hospital, Point Pleasant

## Marshall University School of Medicine

***"Cushing's Syndrome and Syndrome X: A Diagnostic Dilemma"***
Feb. 15, 8 a.m., James W. Findling, M.D., MU Medical Center Auditorium, Huntington

***"Death Investigation: A Training Course"***
March 20-21- Huntington
March 23-24 - Morgantown
*(Jointly sponsored by the Office of the Chief Medical Examiner, The State of WV, and the Dept. of Foresnsic Science and the Dept. of Pathology of Marshall University)*

***"Hyperlipidemia in the New Millennium"***
March 21, 8 a.m., Peter Kwiterovich, M.D., St. Mary's Hospital

## Robert C. Byrd HSC - Morgantown

***"Cardiology Update"***
March 25, Robert C. Byrd HSC, Morgantown

***"AIDS in West Virginia"***
May 11-13, Lakeview Resort and Conference Center

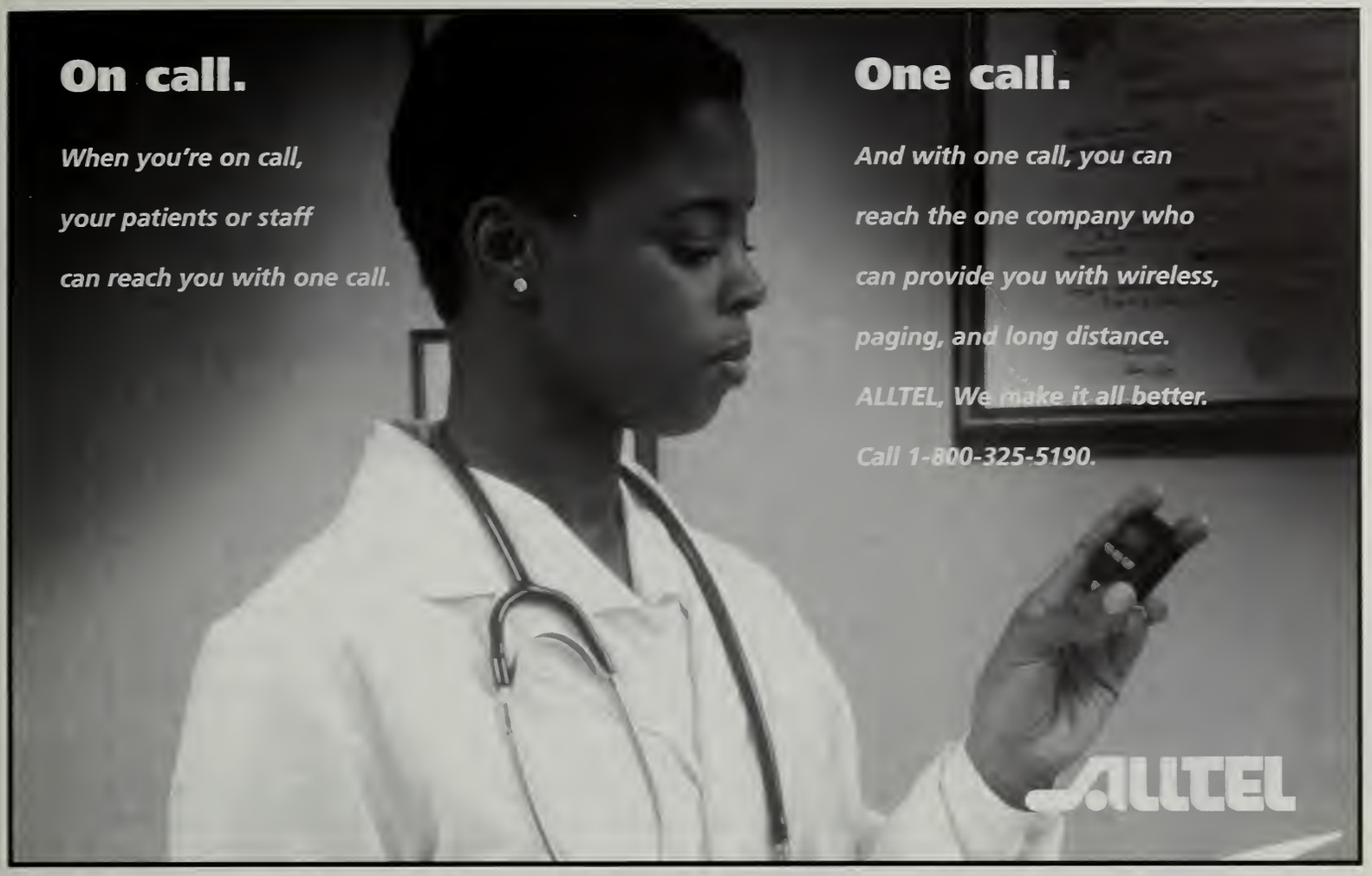
***"Health Access"***
May 18-19, Lakeview Resort and Conference Center, Morgantown

***"WV State Society of Anesthesiologists Annual Meeting"***
May 26-28, The Greenbrier, White Sulphur Springs

***"Rural Aging"***
June 7-11, Charleston Civic Center, Charleston

## West Virginia State Medical Association

***"2000 WVSMA Annual Business Meeting"***
April 14-16, Embassy Suites, Charleston

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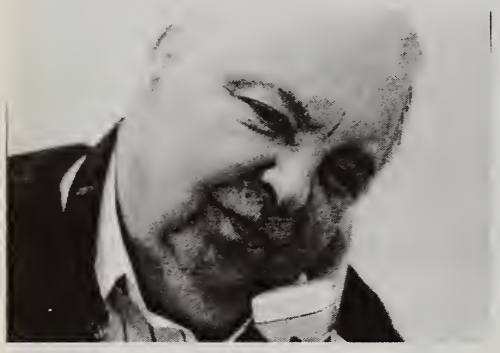
# Bureau for Public Health News

***This page paid for by the West Virginia Bureau for Public Health.***

## James "Tiger" Morton Catastrophic Illness Fund created



**James "Tiger" Morton**

On December 27, 1999, the Department of Health and Human Resources mourned the passing of James Morton, who served as DHHR's Ombudsman and Legislative Liaison for nearly 20 years.

Known as "Tiger" by family and an extended network of co-workers and friends throughout the state, he was recognized within the political and medical communities as an icon of selfless dedication to public service. He was twice awarded the Governor's Distinguished West Virginian Award. .

Tiger's office within DHHR was sometimes known as the *"Court of Last Resort"* because of his significant skills in using personal and political networks to help people in dire emergencies. People suffering a physical or mental illness that had exhausted all their financial resources sometimes found doors of opportunity opened for them as a result of Tiger's dedication to serving others. He was not a doctor, elected official, or a wealthy man, but his work saved lives.

Tiger's memory was eulogized by Sen. John D. Rockefeller as his body lie in state at a precedent-setting memorial service in the Statehouse Rotunda.

On March 13, 1999, the West Virginia Legislature passed House Bill 2841 establishing the James "Tiger" Morton Catastrophic Illness Fund, recognizing Tiger's considerable humanitarian contributions to West Virginians. The fund received an allocation of $1million.

The administrative board for the Tiger Fund is to be comprised of a DHHR representative, a licensed medical doctor, a licensed attorney, a licensed nurse, a licensed social worker and two members of the public at-large active in community affairs. No more than five members of one political party may serve on the board at one time. Members of the Tiger Fund board serve five-year terms and are appointed by the Governor.

There is to be a director of the fund, which will be a full-time position with assistance from the Secretary of health and Human Resources. The director, when hired, will receive and evaluate applications from potential fund recipients and present them to the board.

Potential recipients of the funds must exhibit a critical need for access to medical treatment, care and related services that are unavailable to the applicant through other traditional sources.

Contributions to the Tiger Morton Catastrophic Illness Fund can be mailed to:

**James Tiger Morton Catastrophic Illness Fund**
**State Capitol Complex**
**Building 3, Room 206**
**Charleston, WV 25305**

## Public Health Calendar

### March

Eye Donor Month

Mental Retardation Awareness Month

National Kidney Month

National Nutrition Month

National Social Work Month

Workplace Eye Health and Safety Month

Shamrocks Against Dystrophy for the Muscular Dystrophy Assoc.

National School Breakfast Week (6-10)

Brain Awareness Week (13-19)

Children and Healthcare Week (19-25)

Poison Prevention Week (19-25)

World TB Day (24)

National Doctor's Day (30)

### April

Alcohol Awareness Month

Autism Awareness Month

Child Abuse Prevention Month

STD Awareness Month

Medical Lab Week (2-8)

Healthcare Access Personnel Week (3-9)

Public Health Week (3-9)

Infant Immunization Week (16-22)

Organ/Tissue Donor Awareness Week (16-22)

World Health Day (7)

March of Dimes WalkAmerica (29-30)

# Poetry Corner

## A Beautiful Day

It was a beautiful day,
but all in all,
not quite the nicest;
For you were not here
to share the day
with me.
Yet, as the day wore on,
in some warm way,
I sensed your presence;
I talked with you
and felt you close
to me.
It was a beautiful day,
and in some ways
quite like the nicest,
When you were here
to share my day
with me.

E. Leon Linger, M.D.

## The Coal Tipple

She was blue - cobalt blued
of beams of steel
grimed through.

She was a living - a living sweet
now naught for naught
an end indeed . . .

She done been bought.

John Henry McWhorter, M.D.

# Robert C. Byrd Health Sciences Center of West Virginia University News

## Blanchette Rockefeller Institute to focus on neurosciences

The Blanchette Rockefeller Neurosciences Institute, a multi-million dollar international research center, will focus on the development of new drugs and diagnostics to treat and diagnose neurological and cognitive disorders. The Institute will be headquartered at West Virginia University.

The Institute, the only major institute in the world focusing on human memory, was announced Dec. 13 by U.S. Senator John D. Rockefeller IV. It is named for his mother, who after battling Alzheimer's Disease for nearly a decade, succumbed to the disease in 1992.

Senator Rockefeller also announced that the Institute will bring together one of the world's foremost research teams in memory and cognition, led by 29-year-old NIH veteran Dr. Daniel Alkon. Dr. Fred Butcher, associate vice president for health sciences, will be the executive director of the Institute.

## Ericson named director of Blood and Marrow Transplantation

Ericson

Dr. Solveig G. Ericson has been named director of WVU's Blood and Marrow Transplantation Program after serving as interim director since July.

Dr. Ericson is an assistant professor in the Departments of Hematology/Oncology and Microbiology/Immunology. She has been a WVU faculty member since 1995, and received both her medical degree and her doctorate degree in physiology from Boston University School of Medicine.

## WVU students honor Traubert

Traubert

Dr. John W. Traubert, family medicine, was recently featured in an ad in USA Today as one of the nominees for the Association of American Medical Colleges and Pfizer Medical Humanities 1999 Humanism in Medicine award.

Dr. Traubert was one of 55 honorees from across the country who were nominated by the AAMC Organization of Student Representatives. The award honors med school faculty physicians who embody the best qualifites of a teacher.

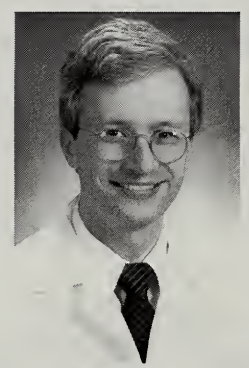
## Family Medicine residency program wins national award

WVU's Family Medicine residency program recently won a national award for its innovative way of educating resident physicians and patients.

Residents are asked to choose between a one-month course on lifestyle changes geared to disease management or a health promotion course that requires them to live as a diabetic. The idea is to provide healthy lifestyle options for the resident physicians and also boost their ability to deliver quality patient education by sharing a patient's experience.

The program won an award from the Society of Teachers of Family Medicine in Austin, Texas, in November.

## Device may save heart attack victims from sudden death



Schmidt

A device that regulates heart rhythm may save the lives of people with coronary artery disease.

WVU was one of 85 heart centers nationwide that participated in a study that suggests the use of an implanted defibrillator reduces the risk of sudden cardiac arrest or death from arrhythmia. Results of the study were published in *The New England Journal of Medicine.*

"The purpose of this investigation was to see if we can better prevent death from heart attacks in patients who, following an attack, suffer spells of abnormal rhythm or who have weakened their heart muscles," said Dr. Stanley Schmidt, cardiology, who organized WVU's participation in the study. "A defibrillator seemed to reduce the risk, but now we need to know how to identify these patients."

Ten percent of those who survive heart attacks die within a year after leaving the hospital, the study's authors said.

The death rate among the 700 participants nationwide dropped 27 percent for patients with coronary disease who used a defibrillator, a device that delivers electric shocks to the heart to control a fast heartbeat. The rate was not significantly changed for patients who used both a defibrillator and drug therapy.

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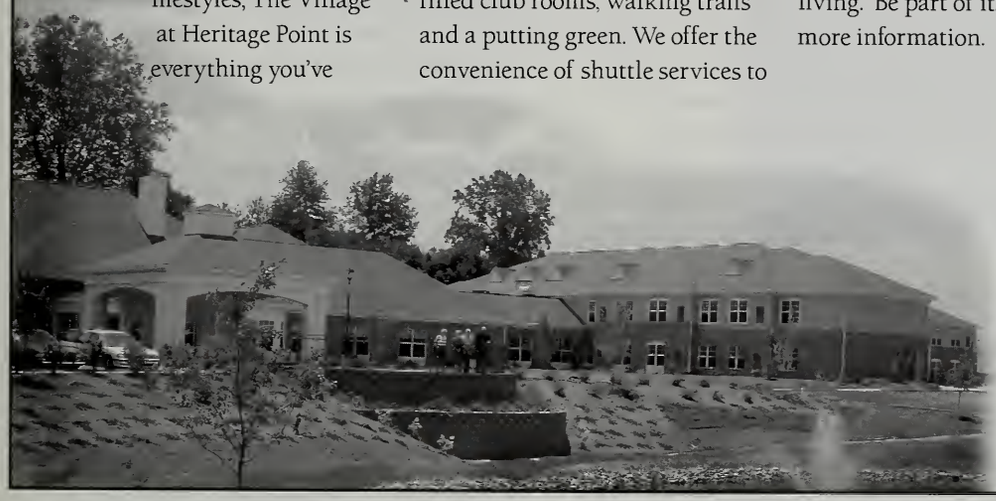

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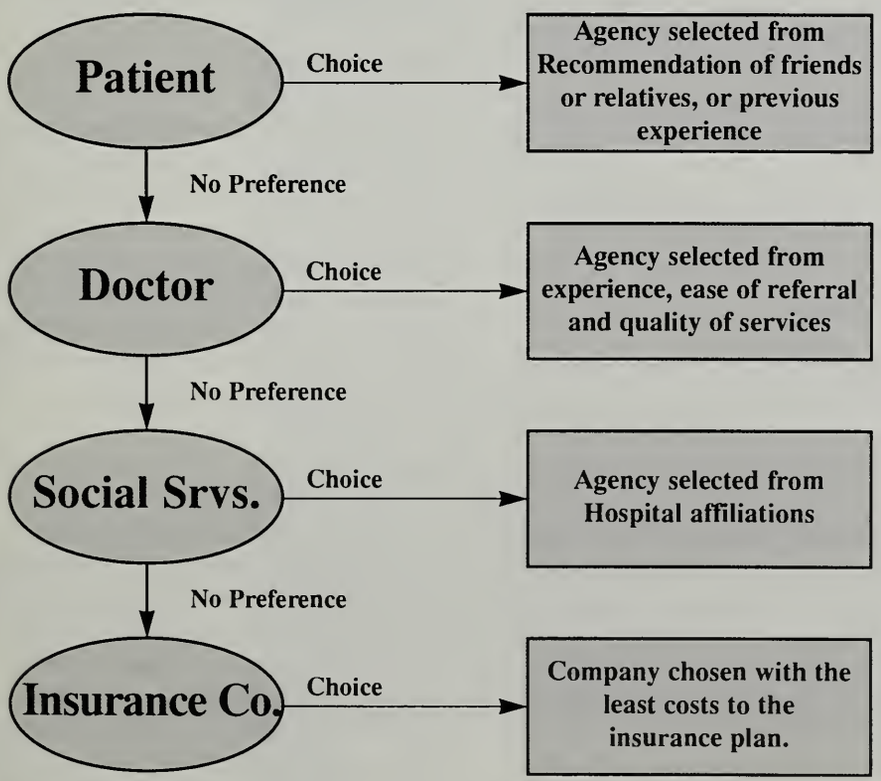


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# Marshall University School of Medicine News

## New faculty join School of Medicine

Eleven physicians in nine specialties have joined the faculty of the School of Medicine since July, bringing new expertise in a number of areas, including nuclear cardiology, child psychiatry and fine needle aspiration biopsies.

By department and title, the new faculty members are:

### Cardiovascular Services

**Tina M. Sias, M.D., asst. professor.** She is board-certified in nuclear cardiology and cardiovascular disease as well as internal medicine. A graduate of the Marshall University School of Medicine, she did her residency at Ohio State University, her cardiology fellowship at Marshall, and her nuclear cardiology fellowship at the University of Virginia. Her honors include receiving the Genetech Award for Outstanding Cardiology Fellow.

### Family/Community Health

**Catherine A. Adkins, M.D., asst. professor.** A graduate of the MU School of Medicine, she was selected to participate in Marshall's accelerated family practice residency program. She is a member of Alpha Omega Alpha and was selected outstanding first-year resident in family practice during her training.

**Charles W. Clements II, M.D., asst. professor.** He is a graduate of the MU School of Medicine and the accelerated family practice residency program, for which he was chief resident for the 1998-99 year. A member of Alpha Omega Alpha, he was honored as second-year resident of the year. He received the Mead Johnson Award for Graduate Education in Family Practice in 1998. He retired from the U.S. Army in 1993 as a lieutenant colonel.

### Internal Medicine

**Todd W. Gress, M.D., asst. professor.** He received his M.D. degree from MU, where he completed his residency and was chief resident, then earned a master's in public health degree from Johns Hopkins in conjunction with his general internal medicine fellowship there. His medical school awards included the Ciba-Geigy Award, "outstanding student" awards in cardiology and gastroenterology, and three awards for research presentations.

**Dawn L. MacFarland, M.D., asst. professor.** An MU School of Medicine graduate, she completed her residency at Marshall and was chief resident for the 1998-99 year. She has made a number of presentations, and is a co-author of a research study published in the *Journal of Experimental Biology.*

### Obstetrics and Gynecology

**Bruce A. Ratcliff, M.D., professor.** He received his M.D. degree from the University of Virginia, did his internship at the University of Kentucky, and completed his residency at the University of Virginia. In private practice in Huntington since 1973, he is chief of OB/GYN at Cabell Huntington Hospital and has served as president of the hospital's board of trustees.

### Pathology

**A. Betts Carpenter, M.D., Ph.D., professor and vice chair of pathology.** She received her M.D. from MU and her Ph.D. in microbiology and immunology from the Medical College of Virginia. She did her residency at MU, and a cytopathology fellowship at University of Kentucky. A member of Alpha Omega Alpha, she received a number of awards as a student and resident. She has served on the faculty of the University of Pittsburgh, where she was associate director of the Div. of Clinical Immunopathology.

### Pediatrics

**James T. Binder, M.D.,** will join MU March 1. He received his M.D. from the Univ. of Pittsburgh, did a pediatric residency at Bronx Municipal Hospital Center, a psychiatry residency at WVU, a behavioral pediatrics fellowship at the Children's Orthopedic Hospital in Seattle, and a child psychiatry fellowship at WVU. A Phi Beta Kappa graduate of Manhattan College and a member of Alpha Omega Alpha, he was honored for excellence in clinical psychiatry at WVU. He has been an assistant professor at WVU, director of its child psychiatry consult service, and co-director of its psychiatric interviewing mentorship.

**Chaundra J. Maddox, M.D., asst. professor.** A graduate of the WVU School of Medicine, she did her residency at its Charleston Division and was chief resident in pediatrics. A member of Alpha Omega Alpha, she received the Janet M. Glasgow Achievement Award as the top-ranked woman in her graduating class.

### Psychiatry

**Stephen D. Durrenberger, M.D., asst. professor.** He holds degrees from both the WVU School of Medicine and the Univ. of Connecticut School of Pharmacy. He did his residency at the Univ. of Kentucky, where he received the Annual Resident Research Award. He worked for Eastern State Hospital in Lexington from 1996-99.

### Surgery

**John M. Carl III, M.D., asst. professor.** A graduate of MU's School of Medicine, he did his surgery residency at the Univ. of Louisville and MU. He has been a research scholar at the Howard Hughes Medical Institute of the NIH as well as a summer research fellow at the NIH. He received clinical honors for his work as a med student.

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# Who are we?

We are members!

Members make up the membership of the West Virginia State Medical Association Alliance. A member is defined as a person belonging to a group or part of a society while membership is defined as a group of persons with a common interest. By these definitions, we can see why each member is an important voice of the state and national alliance that enhances the health and welfare of the medical community.

With each new member, the voice of the Alliance grows louder and stronger in its efforts to achieve its goals. Many volunteer hours of working together provides a framework that can be used to successfully halt teenage binge drinking, decrease tobacco use among young people, provide ways for children to cope with the problems of bully harassment, increase breast cancer awareness, provide support and education for local leadership, influence legislation in conjunction with the goals of the WVSMA, and provide direction and leadership to medical students and spouses. Many more projects are ongoing and new ones develop as the problems of society change.

As you can see, we still need for every physician's spouse to become a member to increase our membership and to make our projects even more effective. Make it your goal to invite one new member to join our collective voice in improving the medical care and increasing the potential for our voices to be heard. Call today and make your voice heard!

Betty Kuppusami
Membership Chairman, WVSMA Alliance

Prasadarao B. Mukkamala, MD

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Dr. Mukkamala is a Diplomate of the American Board of Physical Medicine and Rehabilitation and the American Board of Electro-Diagnostic Medicine.

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# WESPAC News

We would like to thank these physicians and Alliance members who made the following contributions to WESPAC since December 28:

## Chairman's Club ($1,000)

Ronald Cordell, M.D.
Ahmed Faheem, M.D.
Alfredo C. Velasquez, M.D.

## Extra Miler ($500)

William Harris, M.D.
Thomas Jung, M.D.
Simon McClure, M.D.

## Dollar-A-Day ($365)

David Avery, M.D.
Thomas Chang, M.D.
Frederick Gillespie, M.D.
Theodore Jackson, M.D.
Paul Jakubec, M.D.
Carl Liebig, M.D.
Craig Morgan, M.D.
David Waxman, M.D.

## Campaigner Plus ($101-$200)

Finbar Powderly, M.D.
Aristotle A. Rabanal, M.D.

## Campaigner ($100)

Vincente Almario, M.D.
A. Benavides, M.D.
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Thomas VonDohlen, M.D.
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Vera Holyman, M.D.
Colin Iosso, M.D.
Harold Leeper, M.D.
Stephen Smith, M.D.

# Obituaries

## Fred Lewis Goff, M.D.

Dr. Fred L. Goff, 73, of Nitro, died March 22, in Thomas Memorial Hospital, South Charleston, after a short illness.

Dr. Goff was born in Charleston and received A.B. and B.S. degrees from West Virginia University. He received his M.D. from the Medical College of Virginia in 1952, and then served his internship at Charleston General Hospital.

Dr. Goff was a family practitioner in Nitro during his career and he served on the Thomas Memorial Hospital staff. A member of the WVSMA since 1954, Dr. Goff was also a member of the AMA.

An Army Air Corps veteran of World War II, Dr. Goff served with the 307th Bomb Group. He was a member of St. Paul's United Methodist Church and Sleepy Hollow Country Club.

Surviving: wife, Mary Jane Goff; daughter, Carolyn Goff of Morgantown; sons, Roger of Nitro, David and Dale, both of South Charleston; brothers, William of Charleston, Charles of New Smyrna Beach, Fla.; sister, Hazel Thomas-Forbes of Morgantown; three grandchildren.

Donations may be made to St. Paul's United Methodist Church, 20th St. & Second Ave., Nitro, WV, 25143, or the American Heart Assoc., 211 35th St., Charleston, WV 25304.

## Meryleen Bailey Smith, M.D.

Dr. Meryleen Bailey Smith of Peterstown, died Dec. 28 in Carilion Giles Memorial Hospital, Pearisburg, Va.

Dr. Bailey Smith was born Sept. 13, 1917, in Rock, W.Va. She was a daughter of the late Addison Crockett and Alice Shutt Bailey.

Dr. Bailey Smith attended Mary Baldwin College and received her M.D. from The University of Cincinnati in 1943. She served her internship at Jewish Hospital in Cincinnati. She later graduated from the University of Pennsylvania Graduate School of Medicine and was a resident in pediatrics at Robert Packer Hospital, Sayre, Pa.

Dr. Bailey Smith was certified by the American Board of Pediatrics. She was on the staff at Williamson Memorial Hospital in Williamson, and was the company physician for C. H. Mead Coal Company. Dr. Bailey Smith also had a private practice in Peterstown and Rich Creek, Va., from 1957-62, and was a pediatric consultant for the Maternal and Child Health Div. of the State Health Dept. from 1962-69.

In addition to being a WVSMA and AMA member, Dr. Bailey Smith was also a member of the Mercer County Medical Society, the American Public Health Association, the American Academy of Pediatrics, and WV Public Health Association. Dr. Bailey Smith was a past secretary of the WV Pediatric Society; a member of the Peterstown Chapter 118, Order of the Eastern Star, Alpha Delta Kappa; the Daughters of the American Revolution; and the Peterstown United Methodist Church.

Dr. Bailey Smith was preceded in death by one sister, Violet Bailey Lacy, and one brother, Audrey Crockett Bailey.

Survivors include one son, Alexander Moffett Smith of Peterstown; one daughter, Roberta Smith Matney of Blacksburg, Va.; one brother, Dr. Lucian Percy Bailey of Bluefield, Va.; and several nieces and nephews.

Memorial contributions may be made to the American Cancer Society of the United Methodist Church in Peterstown.

## Jack Donald Woodrum, M.D.

Dr. Jack Donald Woodrum, 75, of Hinton, died Jan. 5, in Summers County Appalachian Regional Hospital following a long illness.

Dr. Woodrum had lived most of his life in Summers County. He was a 1943 graduate of Hinton High School. He served as a pharmacist mate on the destroyer U.S.S. Kearney during WWII from 1943-46, serving in combat in the Atlantic, the Mediterranean and the invasion of France.

Dr. Woodrum received A.B. and B.S. degrees from West Virginia University, and graduated from Washington University Medical School with honors in 1952. He served his internship at St. Lukes Hospital in St. Louis, Mo.

Dr. Woodrum had practiced medicine and surgery in Hinton since 1953. He operated a private family practice known as the Woodrum Clinic in Hinton from 1970 until his illness in Oct. 1999. He was on the medical staff at the old Hinton Hospital and Summers County Appalachian Regional Hospital, where he was the former chief of staff. In addition, Dr. Woodrum was the medical director of the Summers County Continuous Care Facility and was the county health officer of Summers County.

Dr. Woodrum was board certified as a diplomat of the American Academy of Family Physicians and was a fellow in the AAFP. In addition to being a member of the WVSMA and AMA, Dr. Woodrum was a member of the Summers County Medical Society and the International College of Surgeons. He served on the Summers County Board of Education for a number of years, was a former vice president and board member of the First National Bank of Hinton, and served on the board of directors of the First Century Bank in Hinton.

Dr. Woodrum was preceded in death by two brothers, Hobart Glenn and Howard Woodrum; and a sister, Geneva Woodrum. Survivors include his wife of 38 years, Joan Briers Woodrum; five sons, Tom and his wife, Connie, of Hinton, Tim and his wife, Christine, of Roanoke, Va., Mark of Hinton, Jack David and his wife, Debbie, of Hinton, and Joseph of Athens; a daughter, Donna Sue Mock and her husband, Freddie, of Hinton; and 10 grandchildren, Brian and Micah Woodrum, D. F. and Mollie Mock, Erich, John and Elliot Woodrum of Roanoke, Jacob and Jaxson Woodrum, and Kara Wood of Hinton.

Donations may be made to The Summers County Hospital Auxiliary.

# Classified


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Be an advocate for the health of the people we serve: Become a member of the West Virginia Medical Institute, WVMI.

WVMI is a physician-sponsored, non-profit organization chartered in 1973 to provide physician education. During the past 27 years, WVMI has evolved into a multifaceted, nationwide health care quality organization. Our mission is to improve the health of the people we serve — a mission West Virginia physicians embrace daily.

WVMI membership is free and open to any physician licensed in West Virginia and currently practicing in the state. Many benefits come with membership. First, you are eligible to join the WVMI Board of Trustees, a body that guides the organization. WVMI members can also attend WVMI-sponsored educational events and earn CME credits needed to maintain licensure. WVMI members can also become physician reviewers. And because WVMI needs and appreciates your input, you can assist in criteria development and implementation.

Members' practices can benefit as well. Tapes of WVMI's television program, *"Lifeline: The Senior Health Magazine,"* are available free to help you educate patients on preventive health issues and Medicare rights. Copies of the companion *"Lifeline"* newsletter are also available free. In addition, members receive *"Quality Time,"* WVMI's quality improvement newsletter for physicians and other health care professionals.

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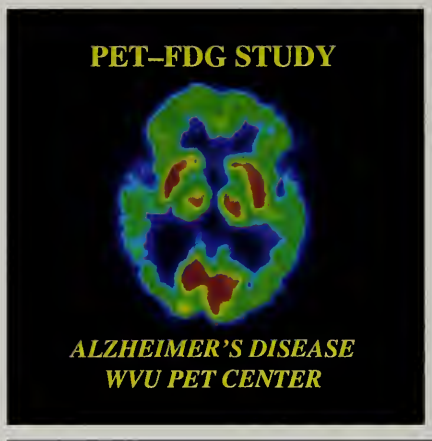


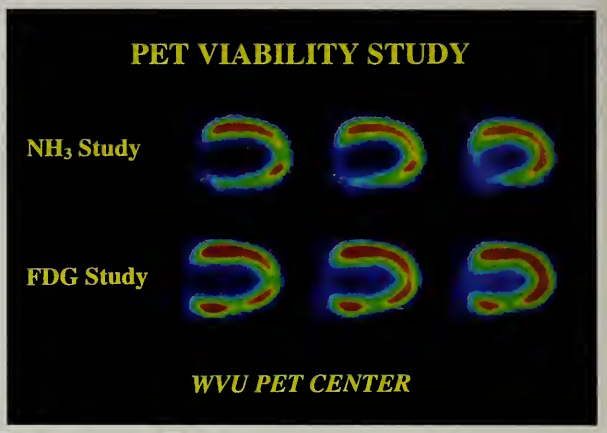


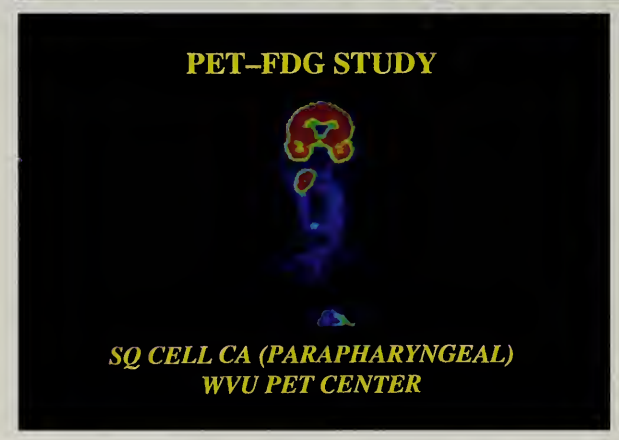

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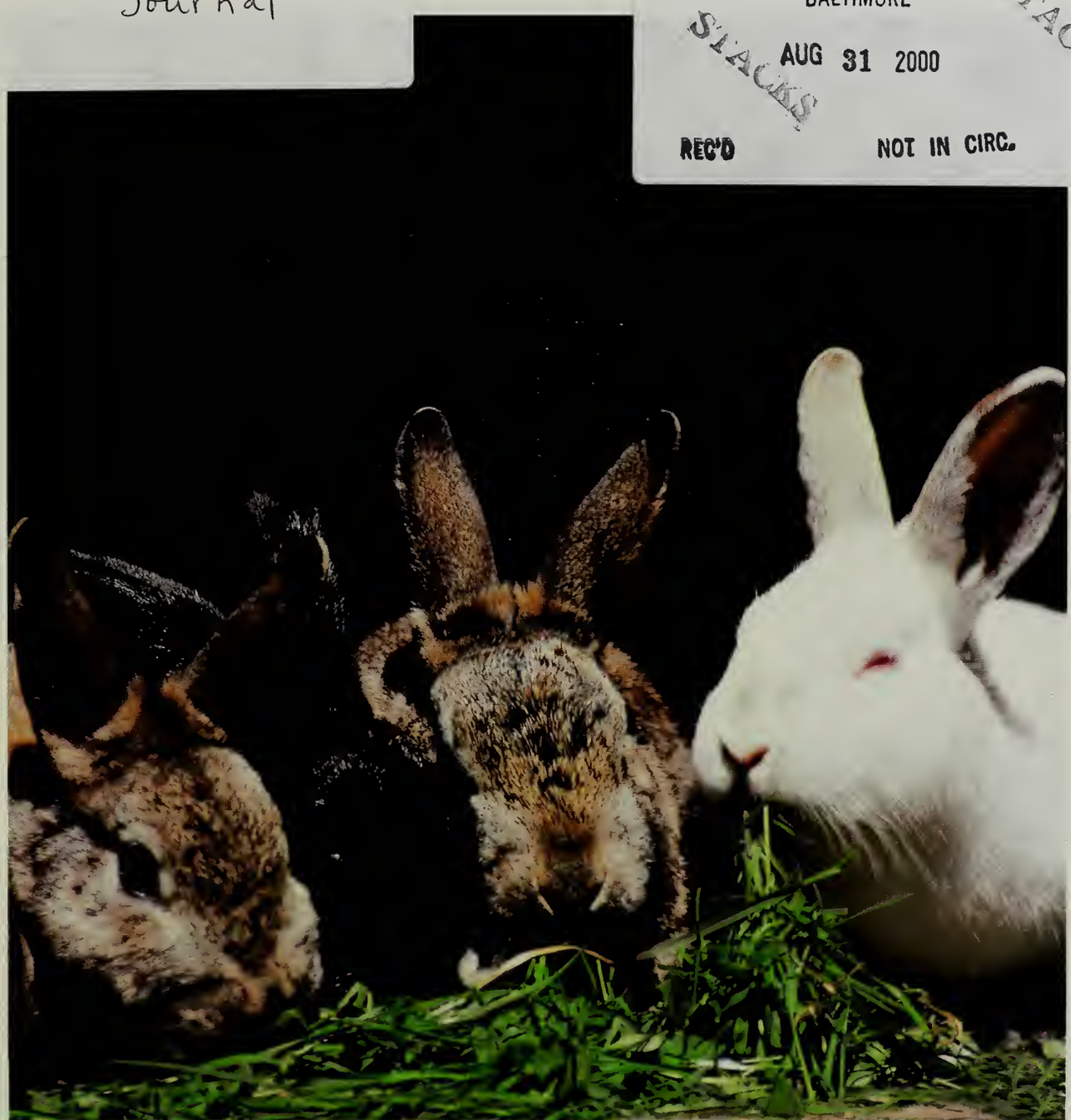

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Robert C. Byrd Health Sciences Center of West Virginia University/ Charleston Division, Auditorium
Charleston, WV
*Stefan R. Maxwell, MD*
Program Chairman

**Obstetrics and Gynecology Update: Pre-conference For Family Physicians**
Thursday, April 6, 2000
5 p.m. to 9 p.m.
Charleston House Holiday Inn
Charleston, WV
*E. Reed Heywood, MD*
Program Chairman

**Resident Research Day**
Tuesday, April 11, 2000
8 a.m. to 4:30 p.m.
Robert C. Byrd Health Sciences Center of West Virginia University/ Charleston Division, Auditorium
Charleston, WV
*Michael J. Lewis, MD*
Program Chairman

**Pain and Suffering: A Multidimensional Approach**
Wednesday, May 17, 2000
7:30 a.m. to 4:15 p.m.
University of Charleston
Charleston, WV
*Carolyn Sue Warren, MD*
Program Chairwoman

**Current Trends in Sleep Medicine**
October 6, 2000
8 a.m. to 4:15 p.m.
Days Inn Conference Center
Flatwoods, WV
*George L. Zaldivar, MD*
Program Chairman

## Life Support Training

**Advanced Trauma Life Support Provider Course**
May 11-12, 2000
7:30 a.m. to 6 p.m.
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Education and Training Center
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Charleston, WV
*James W. Kessel, MD*
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**Advanced Cardiac Life Support Provider Course**
April 15-16, 2000
May 20-21, 2000
June 26-27, 2000
8 a.m. to 4:30 p.m.
Robert C. Byrd Health Sciences Center of West Virginia University/ Charleston Division, 4th Floor
Charleston, WV

**Advanced Cardiac Life Support Renewal Course**
April 14, 2000
May 19, 2000
8 a.m. to 4:30 p.m.
Robert C. Byrd Health Sciences Center of West Virginia University/ Charleston Division, 4th Floor
Charleston, WV

**Pediatric Advanced Life Support Provider Course**
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**Pediatric Advanced Life Support Renewal Course**
May 5, 2000
8 a.m. to 4:30 p.m.
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## Outreach Programs

**Update on Osteoporosis**
Wednesday, April 5, 2000
6 p.m.
Fayette County Medical Society
Plateau Medical Center
Oak Hill, WV
*Alfred Pfister, MD*

**Infertility Update**
Tuesday, May 2, 2000
Noon
Camden Clark Hospital
Parkersburg, WV
*Tamer M. Yalcinkaya, MD*

**Herbal Medicine**
Wednesday, May 3, 2000
12:30 p.m.
Montgomery General Hospital
Montgomery, WV
*Shelda Martin, MD*

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### *On The Cover*

**Rabbits munch on some freshly picked grass in the doorway of their hutch on the Burky farm in Pickens.**

***Photo by Nancy L. Hill, Managing Editor, WV Medical Journal***

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# Manuscript Guidelines

All articles for the *West Virginia Medical Journal* must be submitted on an IBM compatible disk. Microsoft Word 97 is preferred, but other languages are acceptable. If the manuscript contains tables, the main body of the manuscript and references should be saved as one item, i.e., *article*, and then each table should also be saved as a separate item, i.e., *Table 1, Table 2*.

All scientific manuscripts should be prepared in accordance with *"Uniform Requirements for Manuscripts Submitted to Biomedical Journals."* Papers will not be considered for publication if they have already been published or are described in a manuscript submitted or accepted for publication elsewhere. All persons designated as authors should have participated enough in the work to take public responsibility for the concept.

Manuscripts should be accompanied by one extra copy, be double-spaced, have each page numbered and should include a title page, an abstract of no more than 150 words, and references numbered consecutively. No more than 10 references will be published and then a statement will appear that the author should be contacted for the other references listed in the manuscript.

Tables, figures and photos should be numbered, and indicated with parentheses whenever they are mentioned in the text, i.e. (Table 1), (Figure 1). Legends should be included for all figures and photographs.

Photos must be unmounted glossy prints in a 5 x 7 format or smaller. Black and white photos are preferred. Cost of printing photos in excess of four will be billed to the author at a cost of $13 for each photo. Each photo should have a label pasted on its back indicating its number, the author's name and an indication of its "top." Do not write on the back of photos, scratch or mar them with paper clips, or mount them on cardboard. Drawings and charts should be created in black and white.

All scientific material is reviewed by the editor and three members of the Publication Committee. Other articles are usually only reviewed by the editor. All articles should be addressed to:

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*West Virginia Medical Journal*
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Charleston, WV 25364

If you have questions or need more information, phone Nancy L. Hill, managing editor at (304) 925-0342.

# President's Page

## Statistics on medical errors misleading

Headlines recently blared out that *"Medical errors are the eighth leading cause of death!"* This certainly got my attention and made me wonder who was the source of this information.

Statistics of this nature can easily be fudged one way or the other depending on your goal. As I read the article, the source was revealed to be a study done by the prestigious Institute of Medicine. I was intrigued to say the least. I wanted to read the entire study for myself to determine if I agreed with the conclusion or not.

I learned that the Institute of Medicine formed the Quality of Health Care in America Committee in 1998 to study medical errors and develop a strategy to combat the problem. Actually, a very good idea one would think. The title of the committee's work is *"To Err Is Human: Building a Safer Health System,"* and it is edited by Linda T. Kohn, Janet M. Corrigan and Molla S. Donaldson. After reading the report, I have several concerns and criticisms.

It turns out that the glaring headlines were based on two large studies of hospitalized patients. The first study was done in New York City in 1984 and found that adverse events occurred in 3.7% of hospitalizations. Of these adverse events, 13.6% led to death. The second study was conducted in Colorado and Utah in 1992 and found a 2.9% rate of adverse events,with 8.8% of these events leading to death.

When these two death rates were extrapolated over the 33.6 million admissions to U.S. hospitals in 1997, the N.Y. study implies that 98,000 Americans die each year due to medical error and the Colorado/Utah study implies 44,000 deaths. The key word here is *"implies."*

I don't know about you, but I feel that the committee is playing fast and

loose with the numbers here. Let's assume for the sake of argument that the extrapolations are accurate. In 1984, there were 98,000 hospital deaths due to medical errors. By 1992, the error rate decreased and the number of deaths dropped to 44,000. A decrease of over 50% in only eight years.

If I might be allowed to extrapolate a little myself, let's assume that over the last eight years that the error rate has continued to decrease. A good assumption I feel due to improved technology, better computer systems, safer drugs, etc. The number of hospital deaths due to medical error currently is probably a lot closer to 20,000. And if one continues to extrapolate every eight years, then the data *"implies"* that the deaths due to medical error will continue to decrease to become zero at some point.

Do I believe that implication? No. But, I don't believe the committee's implication either. I am troubled by the publicity surrounding the release of the report and the inaccurancies in the press that have gone uncorrected or perhaps even encouraged. Don't get me wrong. Medical error is a problem in our current system and one preventable death is still one death too many. Physicians, nurses, pharmacists and most others employed in the health fields already function at close to the limits for human beings as far as making errors. In other words, you can't decrease the error rate by telling them to be more careful and/or punishing them when an error is made. The only way to decrease the error rate is to decrease the opportunity for errors. This is done through a systems approach similiar to what was done with our air traffic control system in the 1970s. But first, data has to be collected about what errors are being made and where — that is the real crux of the matter.

How can this data best be obtained? The committee is calling for a strong, nationwide mandatory reporting system and I have grave reservations about this. President Clinton has said he does not think a federally-controlled mandatory reporting system would lead to any increase in lawsuits. I think he has been inhaling. I can easily envision the country's vast army of plaintiff attorneys anxiously awaiting the next report on medical errors hot off the press. No one will ever want any errors to come to light. There is potential here to do far more damage than good — the main reason the report troubles me so.

We need a much more conducive environment to encourage health care professionals and organizations to identify, analyze and report errors without the threat of litigation. When this is a reality, we can start building safer health care systems, protecting patients and saving lives.

Phillip R. Stevens, M.D.

# Editorials

## Back to the future???

During the waning days of the recently concluded Legislative Session, there was discussion of using the $12,000,000 soda pop tax revenue to draw down additional Medicaid matching funds, thus generating a total nearing $50 million. Supposedly, WVU would still get their $12 million.

As I was pondering this proposal, I was hit with a relatively stunning revelation! When the tax was initially instituted, to the best of my memory, a bottle of pop cost a nickle. That means that the penny tax was really a 20% tax.

Perhaps it's time to update the pop tax so that the effective rate is the same as when it was originally instituted. Since a can or bottle of pop now costs an average of 60 cents, this would mean a 20% tax would yield 12 cents per unit sold. If the current tax yields $12 million, then the updated tax would bring in $144 million!

Now, let me point out that the current provider tax yield on all groups is about $135 million. Thus, if an updated soda pop tax could be put into place, it would completely replace the provider tax and have an additional $7 million left over to expand the program.

It must have taken great courage for those forward-thinking legislators of the 1950s to pass the original pop tax. Perhaps it's time to go *"Back to the Future."*

F. Thomas Sporck, M.D., F.A.C.S.
Editor

## Vote on helmet law should be unanimous

Inspired by recent legislative activity and an outstanding editorial by Dr. John Schmidt, a neurosurgeon at CAMC, which appeared in the *Charleston Daily Mail*, I have decided to voice my opinion on the vote on Senate Bill 196 which called for repeal of the law requiring motorcycle riders to wear helmets.

Though Senate Bill 196, was rejected, I was appalled to learn that the vote was not unanimous. As a matter of fact, 15 of our state representatives voted to repeal the law requiring cyclists to wear helmets. It is time for physicians and families who see the effects of such reckless behavior to take a more active role in educating the public, and its representatives, about the dangers of helmetless riding.

THOUSANDS of scientific studies have been published on the topic of motorcycle safety and helmet use. Studies from around the world corroborate the U.S. studies which overwhelmingly PROVE:

- Helmets significantly decrease acute/long-term morbidity and mortality associated with motorcycle accidents.
- Health care costs are significantly decreased with helmet use.
- Helmet use is safe; they do not increase the incidence of accidents secondary to obstructed vision or hearing.

With such strong supporting evidence, I am at a loss as to why 44% of our legislators voted to repeal current helmet regulations. Are they not concerned about the health and well-being of their constituents? Do they place "recreation" above public safety? This is obviously not an issue of personal freedom. The effects of this reckless behavior are far reaching.

As a medical student, I was very insulted by the comments made by Majority Leader Truman Chafin on the Senate floor. He insinuated that riding helmetless was safer than going to a doctor's office and that our interest in this issue is "disingenuous." How dare he mock the integrity of our profession? I have dedicated my life to improving neurological care for my patients. By the time I am done, I will have invested 15 years of my life and over $100,000 in student loans to become a physician.

In closing, I want to add that my father is an avid Harley rider who was in a minor accident last spring. Even though the was going only 30 m.p.h., the top of his helmet was cracked clear though. Without his helmet, he would have died.

Tanya C. Warwick
4th Year Medical Student
Marshall University
School of Medicine

# Legislative Reception

***(Top left)*** **Speaker of the House Bob Kiss and his wife, Melinda, visit with WESPAC Chairman Dr. Douglas McKinney at the WVSMA Legislative Reception at the Embassy Suites on Jan. 20.** ***(Top right)*** **Dr. Thomas Sporck, editor of the *West Virginia Medical Journal*, talks with Del. Roy Givens.** ***(Center right)*** **Senator Martha Walker, a candidate for the U.S. Senate, discusses health care issues with WVSMA President Dr. Phillip Stevens.** ***(Center right)*** **WVSMA Vice President Dr. Ahmed Faheem greets Del. John Pino and his wife, Mary.** ***(Bottom)*** **Dr. Rigoberto Ramirez** ***(far right)*** **visits with Delegates Ron Thompson, Joe Smith, Emily Yeager and Larry Williams, and Lydia Queen.**

# White Coat Day

**Highlights during the WVSMA's White Coat Day on Feb. 21 included: *(Top)* Physicians and Alliance members gathering in the House of Delegates when members proclaimed the third Monday in February as White Coat Day. The Senate also made the same proclamation. *(Center left)* A morning briefing at the Embassy Suites by Speaker of the House of Delegates Bob Kiss *(center)* and Senate Minority Leader Vic Spouse *(left)* with WVSMA President Dr. Phillip Stevens moderating. *(Center right)* Sen. William Sharpe Jr. meeting with Amy Tolliver, WVSMA government relations specialist, and Dr. Hil Rizvi. *(Bottom left)* Del. Tal Hutchins of Ohio County discussing issues with Alliance member Linda Elliott, who is executive secretary of Ohio County Medical Society, WVSMA Vice President Dr. Ahmed Faheem *(second from right)* and physicians from the Northern Panhandle. *(Bottom right)* Del. Eustace Frederick visiting with Alliance President Rose Romero *(right)* and Alliance President-Elect Betty Kuppusami.**

# Special Articles

## Latex cases emerging

Q. **After reading several headlines concerning latex allergies, I am growing concerned about continuous exposure and the liability risks of latex in the health care environment. Have there been any new developments relating to this issue?**

A: While health professionals search for ways to protect patients and employees from developing latex allergies and reactions, the issue has emerged in the headlines because of several high-profile lawsuits alleging negligence in causing extreme allergic reactions — including several deaths — brought against latex manufacturers. Given the public's sensitivity to this issue, medical/legal experts expect increased litigation. The cause of latex allergies and reactions is linked to several proteins found in latex. These proteins adhere to glove powder and float through the air finding their way onto the skin and into the lungs of patients and health care providers. As with any problem, health care providers must assess the risk latex poses to their employees and patients, then evaluate the pros and cons of different methods of controlling the problem.

Risk management experts suggest that health care professionals take the following precautions:

- Ask patients about latex sensitivity.
- Ask patients if they have experienced itching, a rash, or wheezing after blowing up a balloon or after wearing latex gloves.
- Counsel and educate patients and employees at risk for developing a latex allergy.
- Recommend patients or employees allergic to latex carry with them at all times non-latex gloves for use during routine exams and medical emergencies.
- Check to see if state laws restrict the use of latex gloves.
- Consider using non-latex medical products.
- Consider using reduced-powder or powder-free gloves.
- Have an emergency response procedure in place.

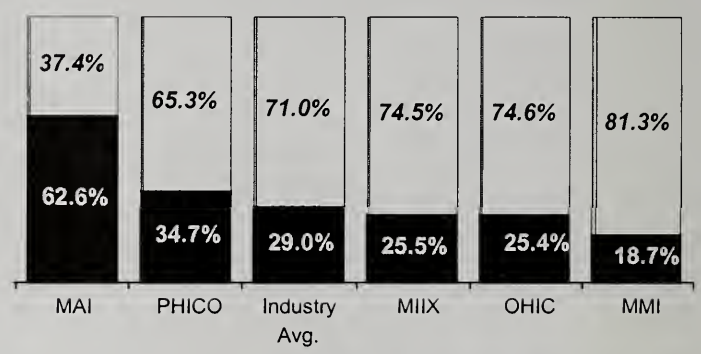
Physicians insured by Medical Assurance, the WVSMA's endorsed professional liability carrier, may contact the company's Risk Resource Center for prompt answers to liability questions by calling (800) 282-6242 or via e-mail at rmhelp@maih.com.

## *The MA difference*

We have reported before on the difference between Medical Assurance, the WVSMA's endorsed carrier, and other medical professional liability insurers practicing in West Virginia. As more West Virginia juries find in favor of the plaintiff and award million dollar verdicts, the need for a strong defense is greater than ever. But who really spends money on defense?

The plain truth is that Medical Assurance's commitment to defend claims far exceeds the other active carriers in West Virginia. As you can see in the chart below, MA spends more than 60% of its total loss payments on the defense of claims — that's over twice the national average.

### Measuring The Defense Commitment




**Accident Years 1990-1998, as of 12/31/98**
**Source: Annual Statutory Statements & A.M. Best**

And if numbers aren't enough, read the thoughts of a physician after experiencing MA's defense in his lawsuit:

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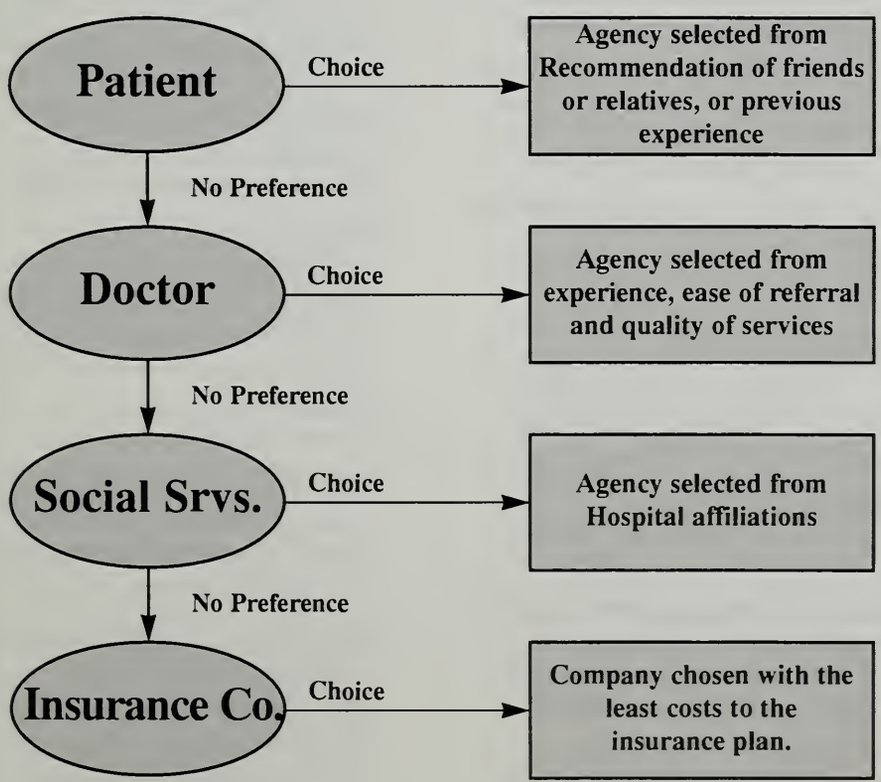


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**W. ANDREW KOFKE, M.D., F.C.C.M.**
*Professor and Vice Chairman, Dept. of Anesthesiology; Professor, Dept. of Neurosurgery*

**KATHLEEN A. ROSEN, M.D.**
*Associate Professor, Dept. of Anesthesiology*

**JOHN BARBACCIA, M.D.**
*Associate Professor, Depts. of Anesthesiology and Neurosurgery*

**ELIZABETH SINZ, M.D.**
*Assistant Professor, Depts. of Anesthesiology and Neurosurgery*

**JAMES CAIN, M.D.**
*Assistant Professor, Dept. of Anesthesiology*

*West Virginia University School of Medicine, Morgantown*

## Abstract

***Simulation of crises has long been a component of training in the aviation and nuclear industries. This technology has been successfully transferred and adapted to acute care medicine and allied health care. In this article, we describe the capabilities and uses of human acute care simulation at West Virginia University Hospital.***

## Introduction

The aviation and nuclear industries have a long history of using crisis simulation. Recently, anesthesiologists and critical care specialists have collaborated with these industries to develop realistic computerized mannequin-based systems which simulate medical crisis situations encountered in the operating room, intensive care unit, emergency room, and other areas where acute care problems can arise.

Crisis simulation systems are being further developed and adapted to medical situations outside of the operating room. For example, these units can provide both inexperienced and experienced personnel in a number of fields with exposure to common and uncommon medical crises such as myocardial ischemia, hypothermia, ARDS, septic shock, anaphylaxis, complex arrhythmias, ACLS protocols, pneumothorax, difficult airway situations, and many others.

In addition, discussions are ongoing regarding potential use of a simulator in credentialing. Worldwide, a simulator is installed weekly, and currently 20% of U.S. medical schools have a simulator.

This article describes the human crisis simulator at West Virginia University, and the potential *multidisciplinary, multi-institutional* educational value of having such a resource in West Virginia.

## Simulator description

The simulator at West Virginia University is shown in Figure 1. It was manufactured by METI, Inc., of Sarasota, Fla., and it is able to model the human physiologic characteristics described in Table 1.

The 11 major components of the simulator are as follows:

### The Mannikin

a) Has interchangeable genitalia to represent an adult male/female. The genitalia comprise part of the Genital/Urinary Subsystem which allows the instructor to control the rate of urine output and each insertion of Foley Catheters.

b) As part of the Drug Recognition Subsystem, three access points (including antecubital, right internal jugular, and femoral veins) are incorporated into the simulated patient mannikin.

c) The mannikin is capable of being placed on its side, back, or front; in a sitting position; or on a floor or in a bed at a distance of up to 12 ft. from the control electronics.

d) All simulation functions and features can be controlled by both a remote Console PC and a hand-held instructor's control PC.

### The Head and Airway

a) Allows for oral and nasal intubation with a wide variety of airway management devices.

b) Right main bronchus and esophageal intubation are possible, with realistic results in terms of the resulting one lung or gastric inflation, and are coupled with the appropriate physiological responses.

c) Incorporates a loudspeaker in the head to allow the patient to 'talk' via an instructor's microphone in the control room.

d) Reproduces all specified difficult intubation situations via mechanisms which control bronchial resistances, laryngospasm and airway visualization.

e) Allows fibre-optic intubation to be practiced.

f) Allows crico-thyrotomy and a variety of other surgical airway recovery procedures to be practiced repeatedly.

### The Respiratory System

a) The lungs are realistically modeled with respect to the range of lung volumes and functional residual capacity, alveolar gas concentrations, and uptake and elimination of respiratory and anesthetic gases and vapors. External equipment such as a capnograph or mass spectrometer correctly recognize and register CO2 exhaled and O2 consumed.

b) Airways resistance, lung compliance, and chest wall compliance are modeled. Increases in airway resistance cause peak but not plateau inspiratory pressure to increase, and the capnogram exhibits an upsloping plateau. Decreases in lung compliance and/or chest wall compliance cause increases in both the peak and plateau inspiratory pressures.

c) The simulator is capable of breathing spontaneously. Rate and tidal volume of spontaneous breaths are automatically regulated and responsive to the arterial carbon dioxide and oxygen concentrations.

d) The simulator provides for manual or automatic ventilation. The simulator "breathes against the ventilator" in appropriate situations. Also, airway mechanics respond to techniques such as PEEP and CPAP.

e) The respiratory system is capable of triggering a ventilator and allows weaning off ventilators to be realistically rehearsed.

f) Normal and abnormal breath sounds are generated and synchronized with the various phases of respiration, with each lung independently variable. Breath sounds are audible over the apex and axilla of each lung and via an esophageal stethoscope.

**Figure 1. Anesthesiology residents *(right)* with the instructor *(left)* experience difficult scenarios as a team exercise at WVU. The instructor uses a hand-held controller of physiologic responses and can introduce physiologic/pharmacologic changes in real-time responses. Residents are managing the airway and injecting drugs which are recognized by the simulator with appropriate physiologic responses.**

g) The mannikin's upper chest rises and falls synchronously with the inflationary states of the underlying lungs. This movement is synchronized with spontaneous, manual and automatic ventilation of the lungs and combinations thereof. Also, this movement is appropriate for esophageal intubation and endobronchial intubation.

h) Chest excursion is proportional to tidal volume and responds appropriately in scenarios such as tension pneumothorax.

i) Pulse oximetry is supported. The reported oxyhemoglobin saturation correlates correctly and dynamically with the alveolar oxygen concentration and the patient's intrapulmonary shunt fraction.

j) The respiratory system is capable of simulating events such as atelectasis, pneumothorax, asthma, and COPD.

k) The pulmonary response to injected drugs is appropriate and dose dependent.

### The Cardiovascular System

a) The cardiovascular system generates signals for oscillometric measurements of non-invasive blood pressure, using a standard BP cuff and monitor, and for invasive blood pressures including ABP, CVP, PAP, PCWP (generated by inflating the balloon of an actual PA catheter), right atrial and ventricular pressures, and the left ventricular pressure.

b) The cardiovascular system includes a pulmonary artery catheter, thus allowing thermal dilution cardiac output response to changes in cardiovascular physiology.

c) The simulator has baroreceptor reflexes and their sensitivity can be controlled by the instructor.

d) The cardiovascular responses to boluses or infusions of drugs are appropriate and dose dependent.

e) Carotid and radial pulses are featured which are absent if systolic BP drops below 60 and 100 mmHg respectively.

**Table 1. The Physiological Characteristics of the Model Driven System.**

**Respiratory Parameters**

- Breath Sounds
- Left Bronchial Resistance
- Right Bronchial Resistance
- Chest Wall Capacity
- Chest Wall Compliance
- Chest Wall Compliance, Distended
- Functional Residual Capcacity
- I to E Ratio (1:x)
- Left Intrapleural Volume
- Right Intraplural Volume
- Left Lung Compliance Factor
- Right Lung Compliance Factor
- Oxygen Consumption
- Ph Shift
- Partial Pressure of Venous $CO_2$
- Respiratory Gain Factor
- Respiratory Quotient
- Respiratory Rate Factor
- Shunt Fraction
- Tidal Volume Factor

**Cardiovascular Parameters**

- Arterial Catheter Position
- Baroreceptor Minimum Pressure
- Baroreceptor Maximum Pressure
- Baroreceptor Gain Factor
- Cardiac Tamponade
- Carotid Pulse
- Heart Rate Factor
- Heart Sound
- Ischemic Index Averaging
- Ischemic Index Sensitivity
- PA Catheter Position
- PVR Factor
- Radial Pulse
- Systemic Vascular Resistance Factor
- Venous Capacity Factor
- Left Ventricular Contractility Factor
- Right Ventricular Contractility Factor

**Drug and Fluid Parameters**

- Administer Command
- Bolus or Infusion

**Other Paramaters**

- Airway Visualization Occluder
- Arterial Blood Temperature
- Body Temperature
- Neuromuscular Blockade
- Intracranial Pressure
- Laryngospasm
- Serum Potassium Ion Concentration
- Urine Output

**Transition Parameters**

- Drug Based
- Event Based
- Time in Current Scenario
- Time in Current State

f) Heart sounds are generated including a range of pathological ones, which are synchronized to the QRS complex of the ECG and audible with a stethoscope over the aortic and pulmonary areas, the left lower sternal edge, the apex and via an esophageal stethoscope.

g) The simulator generates a normal electrocardiogram, but can also create EKG abnormalities such as ischemia, sinus tachycardia and bradycardia, atrial and ventricular ectopic beats, supraventricular and ventricular tachycardia, ventricular fibrillation and asystole. The hemodynamic response to the arrhythmias is physiologically correct.

h) Both hypovolemia and hypervolemia and right and/or left heart failure can be simulated.

i) The simulator meets requirements for ACLS training. The instructor can select and maintain a desired arrhythmia and control the simulator's response to student interventions through scenarios which are written to simulate particular branches of the ACLS algorithm or through "on-line manipulation of the simulator.

### The Metabolic System

a) Metabolic acidosis and alkalosis are simulated under instructor adjustment of the arterial pH, thus facilitating simulation of patients with diabetic ketoacidosis or other metabolic diseases.

b) Arterial blood gases, including, pH, CO2, and O2 are physiologically modeled within the system, such that the results are made available to the remote console readout and the instructor's hand-held controller. The arterial blood gas data displayed corresponds accurately and dynamically to the alveolar concentration of CO2 and O2.

### The Renal System

a) Urine is excreted with a flow rate that can be controlled by the instructor or automatically by the scenario. The flow rates are controllable from either the remote console or the instructor's hand-held controller.

b) Total drug clearances (renal and hepatic elimination) are adjustable for all drugs using the Drug Editor.

### The Nervous System

a) Cardiovascular and respiratory responses to sympathetic and parasympathetic activities are modeled.

b) One arm has electrode attachments for a standard peripheral nerve simulator (PNS). The simulator automatically detects the PNS stimulus pattern (single twitch, train of four, and tetanus). Based on the stimulus patterns, the level of neuromuscular blockade and the type of neuromuscular blocking agent administered (depolarizing/non-depolarizing), the simulator automatically generates the appropriate thumb twitch response.

c) Neurologic dysfunction will be a component of future upgrades and will include eye signs, elevated intracranial pressure, and EEG.

### Drug Modeling

a) The drugs are listed in Table 2.

b) Automatic sensing of I.V. drug and fluid administration together are provided via the Drug Recognition Subsystem.

**Table 2. Pharmacology and Drug Recognition of the Model Driven System.**

**Neurosmuscular Blockers**

atracuirum
curare
doxacurium
metocurine
mivacurium
pancuronium
rocuronium
succinylcholine
vecuronium
cisatracurium

**Antagonists**

edrophonium
flumazenil
naloxone
neostigmine

**Drugs for ACLS Protocol**

bicarbonate
magnesium
isoproterenol
quinidine

**Cardiovascular**

adenosine
atropine
bretylium
calcium chloride
digoxin
diltiazem
dobutamine
dopamine
epinephrine
esmolol
glycopyrrolate
labetalol
lidocaine
metoprolol
nifedipine/sl
nitroglycerine
norepinephrine
nitroprusside
phentolamine
phenylephrine
procainamide
propranolol
verapamil

**Anesthetics**

isoflurane
sevoflurane
nitrous oxide

**Narcotics**

alfentanil
fentanyl
merperidine
morphine
sufentanil
remifentanil

**Hypnotics**

diazepam
etomidate
ketamine
lorazepam
methohexital
midazolam
propofol
thiopental

c) Access by the user to the method of modeling pharmacokinetics and pharmacodynamic properties for educational and research purposes and to allow for the easy addition of new drugs.

1) Interactions on identical effector sites have an additive effect (i.e. two vasopressors).

2) Interactions on different effector sites have a synergistic effect (i.e. a vasopressor and a baroreflex depressant).

### Patient Profiles

a) A wide-range of vendor-supplied patient profiles serve as the starting point for simulations, i.e. young/old patients, male/female patients (including the full-term obstetric patient) along with some common pathologies.

b) Supplied patient profiles are stable if not perturbed by instructor interventions.

c) The Patient Editor provides the user with the ability to create new patient profiles and edit existing ones. It also allows users to *"bookmark"* the condition of a patient at an instant in time. Thus, the operator can repeatedly return to that specific time frame.

### Scenarios, Events and Crises

a) The scenarios listed in Table 3 can be modeled in addition to any other scenarios the instructor can write or acquire.

b) Scenarios are supplied to cover a range of events and simple and complex anesthetic situations. The Scenario Editor allows users to modify scenarios and create new ones via a user-friendly menu.

c) The supplied scenarios even include rare events i.e. malignant hyperthermia, anaphylaxis, tension pneumothorax and cardiac tamponade.

d) The user has full access to information regarding the construction and implementation of pre-configured scenarios, as well as ability to access and modify events via the Scenario Editor and the Control Scenario.

e) Events can be modified "on the fly" during a scenario using the run time user interface. Events can also be overlaid upon one another to create combined situations.

f) There is direct control of all physiologic parameters including many important physiologic signs through the run time user interface, to allow the operator to respond rapidly to unexpected events. For example, the ACLS arrhythmia generator allows the operator to set the patient's cardiac rhythm without compromising the stability of the underlying cardiovascular models.

**Table 3. Human Patient Simulator - Scenario Editor.**

**Basic Anesthesia Skills**

Induction - Routine
Emergence - Routine
Emergence - Hypertension
Emergence - Apnea
Emergence - Laryngospasm
Emergence - Neg. Pressure Pulm. Edema
Hypotension - Hemorrhage
Hypoxemia - Endobronchial Intubation
Hypoxemia - Bronchospasm
Hypoxemia - Atelectasis
Tachycardia & Hypertension
Tachycardia & Hypotension
Tachycardia & Normotension
Bradycardia & Hypotension
Epidural - Sympathectomy
Epidural - Intravascular Injection
Epidural - Inadvertent High Spinal

**Abdominal Aortic Aneurysm**

AAA Induction of Anesthesia
AAA Aortic Clamping
AAA Aortic Unclamping

**Difficult Airway Management**

Can't Intubate; Can Ventilate
Can't Intubate; Can't Ventilate

**Hemodynamic Monitoring Lab.**

Congestive Heart Failure
Hypovolemia
Septic Shock
ARDS/PEEP Titration

**EMT/Paramedic**

Spontaneous Pneumothorax
CHF/PE in Pre-Hospital Setting
Asthma Attack
Gastrointestinal Bleeding

**Nursing**

Patient with CHF & PE
Dysfunctional Chest Tubes
Insulin Shock
Diabetic Coma
Foley Catheter Dysfunction

**Complex Anesthesia Problems**

Anaphylaxis
Malignant Hyperthermia
Tension Pneumothorax
Cardiac Tamponade

**Obstetrics**

Induction of Anesthesia
Epidural
Supine Hypotension Syndrome
Pulmonary Aspiration
Venous Air Embolism
Severe Amniotic Fluid Embolism
Preeclampsia Induction of Anes.
Preeclampsia Epidural

**Respiratory Therapy**

Treatment of Bronchospasm
Incompetent Exhalation Valve
Hypnoxic Drive Elimination
Extubation and Stridor
Suctioning and Hypoxemia
Treatment of ARDS
Control of ICP with Hypervent.
Tracheal Extubation Criteria

**Cardiopulmonary Technology**

Patient with COPD
Patient with End-Stage Renal Dis.
Cardiac Catherization and PTCA

**ACLS Training**

**ATLS Training**

g) Scenario composition is an emerging academic educational area. Many scenarios, with and without peer review, are available.

h) ATLS features are available.

Hardware/Software Features

a) The physiologic and pharmacologic models within the system interact with each other in a realistic manner. For example, positive and negative intrathoracic pressures appropriately influence the arterial, central venous and pulmonary artery pressures as well as cardiac output. A decrease in cardiac output will also result in reduced end tidal CO2.

b) Models in the system create signals which drive the monitoring equipment in a realistic way via the usual transducer inputs. Interface to patient monitoring equipment of major manufacturers is featured.

c) The Data Recorder provides a continuous time-based record of both the patient's physiology and any interventions affected upon the simulated patient by the student. This data is available for output to a printer or for importation to any data analysis software program which can access ASCII data.

d) Software and hardware are and will continue to be designed emphasizing modularity and compatibility with previously delivered simulators. Future modifications and enhancements will be facilitated and be made backward compatible.

e) User Defined Ports are available which are designed so that users can readily interface local developments and research with the simulator system. This interface is accomplished via an established and documented communication protocol.

## Discussion

Human patient simulation has been available for about 10 years, arising out of the aviation industry (5,6). Ongoing improvements have been evident with substantial amount of study to ascertain efficacy of human acute care simulation.

Gaba et al and others have described the use of a simulator to recreate the operating room for research and training (1,2,3,4,18,19). Investigators have subsequently demonstrated that simulators can be helpful in decreasing morbidity due to critical incidents (7-13), crisis resource management training (14,15), and more effectively providing resident trainees with a safe and effective milieu to learn appropriate procedures in acute care situations (16,17).

The human patient simulator at West Virginia University is helping to benefit health care in West Virginia via the following activities and applications:

### Continuing Medical Education

The human simulation unit is available to physicians such as anesthesiologists, emergency and critical care physicians, internists involved in critical care, or surgeons involved in critical care who may encounter acute care problems. The simulator enables continuing education through participation in specialized simulator learning sessions.

Moreover, the simulator creates realistic ACLS training and certification. This unit is valuable to non-specialist rural caregivers who see crisis situations infrequently, but are often first responders expected to provide appropriate and life-saving therapy.

The simulator also provides continuing education for other health practitioners such as nurses, nurse anesthetists, respiratory therapists, paramedics, pharmacists, and pharmaceutical professionals

### Medical, Nursing, Pharmacology, Paramedic and PharmD. Students

The simulator provides these students with an opportunity to learn and make critical decisions outside actual clinical settings in a structured and non-threatening environment. Medical students rotating on clinical services such as anesthesiology, surgery, critical care, emergency medicine, pediatrics, and others can practice on the unit.

Medical and other health profession students taking basic science courses also find the simulator useful in demonstrating physiology and pharmacology principles. As a result, the number of animals sacrificed for medical education should decrease.

The simulator provides nursing and respiratory care students with the training tools to learn about acute care issues, procedures, and therapies. In addition, the simulator can serve as a multidisciplinary training site to teach students from various disciplines how to work together as a team to handle medical crises.

### Resident Training

The Human Patient Simulator is very valuable in similar ways for the training of anesthesia, critical care, surgery, primary care, and emergency medicine residents.

**Table 4. Functions of Director of the WVU Simulator Program.**

- **Be responsible for applying clinical scenarios in the computer software to the needs of West Virginia University and other users;**
- **Make alterations in the software and hardware as needed to realistically devise simulations;**
- **Design, organize and coordinate simulator education sessions for residents, faculty, medical students, allied health professionals, and external users;**
- **Oversee and ensure the high quality of courses or sessions offered by other instructors and/or other organizations;**
- **Perform quality assurance functions to ensure maintenance of high quality instruction.**
- **Supervise simulator technical work and bear responsibility for externally contracted work;**
- **Maintain financial records on income and expenses of the simulator;**
- **Provide an annual report, reviewing finances, numbers trained, quality assurance data, research activities, problems encountered, solutions applied, and suggested directions for the future;**
- **Participate in simulator-related research.**

The simulator prepares residents for many life-threatening situations which will arise during administration of anesthesia in the ICU or ER. Medicare regulations and other factors in the medical, cultural, and legal environment now dictate that anesthesia residents and others be supervised more closely by attendings so they are not as often placed in situations where they must make critical decisions by themselves.

In addition, residents can experience rare conditions i.e. malignant hyperthermia, pseudocholinesterase deficiency with the controlled setting offered by the simulator.

### JCAHO Training

With the simulator program, hospitals can better demonstrate to the JCAH and the public that they actively participate in documentable, testable hands-on training and certification of its health care providers, and should contribute to decreasing the rate of medical errors.

### Certification

A controversial proposal for professional certification has been put forward in anesthesiology circles which may also be relevant to other specialties. It involves using the simulator to certify general acute care competence or competence in specific procedures i.e. pulmonary artery catheter insertion.

The simulator also has potential uses for providing in-house certification in areas such as pediatric sedation, management of chest tubes, insertion of foley catheters, etc.

### Research

The simulator can enable research-oriented educators throughout West Virginia to model clinical scenarios in a controlled setting and allow them to assess learning-related hypotheses and test alternative teaching methods. For example, the effects of fatigue or other factors affecting clinical competence and efficiency could be assessed.

The use of a simulator has been definitively supported in a study by Westenskau et al presented at the Society for Technology in Anesthesiology Meeting in 1998 which showed that ACLS certification with a simulator is superior to traditional methods.

### Bioengineering

The simulator will allow assessment of ergonomics of new devices and techniques. It could be used to test and design the clinical workplace.

### Malpractice Claims

The Human Patient Simulator can be used to educate juries, judges, and attorneys in medical litigation. We have done this at WVU making the simulator available to an expert witness who defines the scenario to be created. The simulator is then videotaped for presentation at trial.

On the tape, the expert witness can use the facilities of the simulator including items such as laryngoscopes, endotrachael tubes, pulse oximeters, monitors, ventilators, and so on, to provide some teaching to juries, judges, and attorneys. The expert witness can then use the simulator to recreate the events according to his/her interpretation of the medical record.

### The Future

A variety of other uses for crisis simulation have been envisioned including team building, integration with surgical virtual reality tools and disaster drills. We have an additional goal to couple the simulator system with the video conferencing capabilities already available in West Virginia.

## Summary

The Human Crisis Medical Simulator at West Virginia University is a statewide and regional resource for education, training, and research involving a number of constituencies. These individuals include medical, nursing, paramedic, respiratory therapy and pharmacy students, and other practitioners who either frequently or only occasionally are involved with acute care situations.

The human patient simulator is staffed and maintained by the WVU Dept. of Anesthesiology at WVU Hospital. A multidisciplinary oversight board has been created to provide long-term planning. Day-to-day functions are managed by the Human Simulator Committee which is chaired by Dr. Kathleen Rosen, director of the human crisis simulation program. Her duties are outlined in Table 4.

More information about the simulator can be obtained on the Internet: www.hsc.wvu.edu/som/anesth.

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# Blunt traumatic subclavian artery injury

***MATTHEW B. YOAK, M.D.***

***BONNIE L. BEAVER, M.D., F.A.C.S.***

***DAVID A. DENNING, M.D., F.A.C.S.***

*Dept. of Surgery, Marshall University School of Medicine, Huntington*

## Abstract

***Subclavian artery injury secondary to blunt trauma is uncommon, accounting for only 3% of traumatic injuries of the upper extremity. Associated injuries of nerve, bone and joint are common. Early recognition and appropriate surgical intervention are essential to reduce disability. Long-term limb dysfunction usually results from concomitant nerve injury. This article describes our experiences treating four patients at two Level II trauma centers in Huntington, W.Va., and reviews the literature on the subject of subclavian artery injury secondary to blunt trauma.***

## Introduction

The complex anatomy of the upper thorax functions quite well to protect the great vessels and their branches. The protective function may, however, become an impediment to diagnosis and management of traumatic injuries to this region of the body.

Blunt traumatic injury of the subclavian artery is uncommon, accounting for 3% of all arterial injuries (1). Most subclavian artery injury (SAI) is due to penetrating trauma. Blunt traumatic injury is the etiology in only 15% of cases (2).

War injuries have provided the largest portion of reported trauma cases. The largest reported civilian series of traumatic SAI was published by Graham et al (3), in which 93 patients were treated over the course of 24 years. It is evident that these injuries are rare; the busiest of trauma services treat only three to four cases per year. The infrequency with which these injuries occur, however, should not understate their importance, since significant loss of life and limb may follow if undetected.

Much force is required to harm this region of the body; thus, the list of concomintant injuries can be extensive. Commonly associated injuries include but are not limited to brachial plexus injury, rib fractures, pulmonary contusion, hemo/pneumothorax, intra-abdominal injury, venous injury, maxillofacial injuries, intra-cranial injury, and glenohumeral dislocation. Injury to the brachial plexus occurs in approximately 55% of cases of SAI and often may be the only sign of a subclinical vascular injury (1). An injury to the subclavian artery should be suspected in patients with an absence of radial pulse on the affected side, brachial plexus palsy, and supraclavicular hematoma. Additional clinical findings may include hypotension, unrelenting thoracic hemorrhage, first rib fracture and widening of the mediastinum (4).

The diagnostic modality of choice is arteriography, which should be performed in stable patients with the previously mentioned findings on physical examination. In cases of ongoing thoracic hemorrhage and persistent hypotension, angiography may be performed while in the operating room prior to incision. It is well established that unstable patients with clear-cut signs of vascular injury may proceed directly to surgery, and that pre-operative angiography may not be feasible (2).

The anterior scalene muscle divides the subclavian artery into three portions; the first, second and third parts. Injury most commonly occurs near the origin of the vertebral artery.

Once the diagnosis of subclavian artery injury is established and operative priorities have been planned, expeditious surgical exposure is critical. Multiple approaches to the subclavian and innominate vessels have been described (6). The most common incisions are median sternotomy, thoracotomy (standard/anterior), supraclavicular, infraculavicular, and a combined supraclavicular and infraclavicular incision with/without resection of the medial clavicle (5).

For the surgeon who rarely operates on subclavian vascular injuries, the most conservative approach is through an extensive incision, allowing for adequate proximal and distal control (7). Radiographically-guided, percutaneously placed balloon catheters may aid in control of hemorrhage pre-operatively (8).

Autogenous vein grafts are the most commonly used conduit in repair of subclavian artery injuries, although primary repair, prosthetic grafts and combinations thereof may also be utilized (1).

Marin et al have published reports on transluminally placed endovascular stent grafts for repair of arterial trauma in critically ill patients, but long-term effectiveness has not yet been documented and current application is limited to penetrating injuries (9).

Nonoperative management of clinically occult arterial injuries has been championed by Frykberg et al (10) at the University of Florida, but likewise, most of the injuries were sustained to the lower extremities and were of pentrating etiology.

## First patient

A 21-year-old male arrived at the Emergency Department six hours after involvement in a motor vehicle accident. His complaints were inability to move his right upper extremity and pain in his right shoulder.

On exam, absence of the radial pulse, dislocation of his right shoulder, and a flail right upper extremity were noted. Pre-operative angiography revealed occlusion of the right subclavian artery.

Revascularization was performed via a supracclavicular approach with a reversed saphenous vein graft. Intra-operative examination of the brachial plexus revealed contusion and hematoma. Fasciotomies were performed due to the length of time from injury to presentation.

Post-operative follow-up over the course of three months showed minimal improvement in movement and sensation of the extremity, but successful revascularization evidenced by presence of a palpable pulse.

## Second patient

A 19-year-old male involved in a head-on motor vehicle accident arrived in stable condition complaining of pain and inability to move his left upper extremity. Physical exam showed absence of distal pulses and a flail upper extremity, as well as fracture of the proximal humerous. Chest radiography revealed hemopneumothorax and fracture of the first rib.

A chest tube thoracostomy was performed. Angiography located a subclavian artery injury. Revascularization with a reversed saphenous vein graft was performed via supraclavicular and infraclavicular incisions. The medial clavicle was resected. Contusion of the brachial plexus with surrounding hematoma was noted intra-operatively.

Although successful revascularization was documented over the next two years during follow-up, this patient has regained only limited movement of his upper extremity.

## Third patient

A 16-year-old male presented to the Emergency Department after being involved in a motorcycle accident. His complaints were of pain in his left shoulder and inability to move his left upper extremity. No distal pulse was palpable and X-rays revealed a 20% pneumothorax and fractures of the first, third and fourth ribs.

Chest tube thoracostomy was performed followed by angiography which revealed injury to the subclavian/axillary artery. Revascularization was performed with a reverse saphenous vein graft via an infraclavicular incision. Transection of the brachial plexus was noted.

His postoperative follow-up period of three months reveals a successful revascularization, but no movement or sensation of his upper extremity.

## Fourth patient

A 13-year-old male involved in a wrestling match earlier that day arrived at the Emergency Department complaining of numbness and weakness of his right upper extremity.

X-ray examination revealed posterior dislocation of the shoulder. The dislocation was reduced in the Emergency Department and the patient's neurologic symptoms dramatically improved. He was discharged home, but returned 16 hours later complaining of a cool, painful upper extremity. Absence of a distal pulse was noted on physical exam and angiography revealed occlusion of the subclavian artery. Revascularization with a reversed saphenous vein graft was performed.

Follow-up of this patient showed successful revascularization with complete return of movement and sensation of the upper extremity.

## Conclusion

Blunt traumatic injury of the subclavian artery is uncommon and may be accompanied by distracting injuries making prompt diagnosis difficult. Absence of distal pulse, brachial plexus palsy, presence of a supraclavicular hematoma, first rib fracture, unrelenting thoracic hemorrhage or a widened mediastinum are strong indications of vessel injury and demand further investigation (5).

A high index of suspicion and a low threshold for arteriography should be maintained. Brachial plexus injury can be expected in over half the patients with subclavian artery injury. This may be partial or complete and transient or permanent (5). Occasionally, brachial plexus palsy may be the only sign of a subclinical vascular injury, but almost always is the determinant of long-term limb dysfunction (1).

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# Serotonin discontinuation syndrome: Does it really exist?

***SHELLEY NUSS, M.D..***
*Assistant Professor of Medicine and Psychiatry, Dept. of Medicine, Robert C. Byrd Health Sciences Center of West Virginia University, Morgantown*

***CHRISTINE R. KINCAID, M.D.***
*Assistant Professor of Medicine and Pediatrics, Dept. of Medicine, Robert C. Byrd Health Sciences Center of West Virginia University, Morgantown*

## Abstract

***Treatment guidelines for depression have typically focused on diagnosis, how to initiate antidepressants, and duration of therapy, while very little is discussed about discontinuing treatment. With the advent of the serotonin-specific reuptake inhibitors (SSRIs), there is now growing evidence to support a "discontinuation syndrome" associated with withdrawal of therapy. This article describes two cases and presents a review of the literature.***

## Introduction

It is well established in the literature that when patients stop therapy with tricyclic antidepressant (TCAs), neuroleptics or mood stabilizers, discontinuation symptoms may occur (1). These symptoms can range from mild to severe and may include physical and psychological complaints.

Recently, there has been growing evidence to support a "discontinuation syndrome" following cessation of SSRI therapy. Unfortunately, the public perceives that antidepressants are "addictive" and only 1/6 of the general population believe antidepressants should be prescribed to depressed patients. However, these symptoms are very different than those associated with withdrawal from alcohol or benzodiazepines. Primary care physicians are prescribing more SSRI antidepressant therapy than ever before, primarily because of the improved side effect profile.

In light of this, physicians need to be aware that patients may experience symptoms upon discontinuation of an SSRI medication. Young et al found that few physicians and not all psychiatrists are aware that patients who discontinue treatment may experience symptoms (3).

We present two cases, where clearly, new symptoms evolved after discontinuation of therapy and in the first case, resolved quickly with reinstitution of therapy.

## First patient

A 27-year-old white female with a strong family history of depression and bipolar disease developed situational depression. She was started on paroxetine (Paxil®) with a good response.

She was maintained on 30 mg./d for six months to complete treatment; the medication was then stopped abruptly. Within three days, she began to experience a "light-headed" sensation, feeling "off-balance," nausea, abdominal cramping, headaches, flank pain and general malaise. Her only finding on physical examination was tenderness in both left and right upper quadrants. Lab studies including CBC, liver function tests, electrolytes, urinalysis and pregnancy test were all normal. The paroxetine was restarted and within three days, she felt back to normal.

Repeated attempts of tapering the paroxetine resulted in return of the same symptom complex. Once the medication was resumed, her symptoms abated. She was changed to sertraline (Zoloft®) 50 mg./d. After stabilization, the patient was successfully weaned from this medication over two weeks.

## Second patient

A 45-year-old male with a past history of alcohol dependency and recurrent major depression had been maintained on trazadone (Desyrel®), a serotonergic antidepressant for over 15 years due to his significant sleep disturbance. His dose had recently been escalated to 500 mg./day due to worsening depressive symptoms.

At 500 mg./day, he developed right upper quadrant pain, bloating, and general abdominal discomfort. Work-up included laboratories for liver pathology, gallbladder and bowel pathology. Liver transaminases were elevated to 15X normal from his baseline. Remaining tests were normal including a RUQ ultrasound.

Transaminase elevations have been reported with trazadone use, so first-line recommendations included discontinuation of the trazadone and acetaminophen, which he used intermittently. One week later, this patient was seen in follow-up. Liver enzymes were now almost normal, however, he complained of extreme dizziness, general malaise, feeling "off balance" when walking, nausea, poor appetite, insomnia, and "electric shock" sensations through his back region. It was felt these symptoms were due to the abrupt withdrawal of the trazadone therapy.

The patient was reassured and symptoms resolved over the next 7-10 days.

## Discussion

Discontinuation symptoms occur in about 1/3 of patients who stop taking SSRIs (4). There are several risk factors for developing discontinuation symptoms after cessation of SSRIs, but length of treatment, half-life and dosage have the greatest impact.

Coupland et al noted that symptoms occurred more often after two months of therapy than with shorter durations (5). Currently the U.S. Depression Guideline Panel recommends treatment with an antidepressant for 4-9 months for a first episode of depression.

Most reports describe an increased frequency of symptoms with paroxetine and fluvoxamine (Luvox®) and the lowest frequency with fluoxetine (6). The half-life of paroxetine is 21 hours while fluoxetine (Prozac®) is almost six days. Clinical studies show that those who develop discontinuation symptoms, are likely to experience it again. Paroxetine also has the most affinity for muscarinic-receptor blockade and is the most potent inhibitor of serotonin reuptake (7).

In the vast majority of cases, SSRI discontinuation symptoms commence within one to three days of cessation of therapy (8). Symptoms may include changes in mood, affect, appetite and sleep and can easily be mistaken for a depression relapse. For this reason, it is necessary for clear and concise questioning and documentation of new symptoms that occur with termination of antidepressant therapy. The important discriminating factor is the time of onset of symptoms. Withdrawal symptoms occur quite rapidly, whereas a depression relapse will occur several weeks after stopping therapy. This will allow accurate and optimal management of the discontinuation syndrome.

Symptoms can be somatic in nature as well as psychological. Many are the same as TCA withdrawal, but some are unique to SSRIs. The manifestations of symptoms often depends on the length of therapy, dose and half-life as mentioned previously (9).

Five clusters of somatic symptoms have been found:

(1) dysequilibrium (e.g. dizziness, ataxia, vertigo);
(2) gastrointestinal (e.g. nausea, vomiting);
(3) flu-like symptoms (e.g. fatigue, lethargy, myalgia, chills);
(4) sensory disturbances (e.g. paresthesias, sensations of electric shock); and
(5) sleep disturbances (e.g. insomnia, vivid dreams)(10).

Along with the somatic symptoms, several psychological symptoms have been observed including crying spells, anxiety, agitation and irritability. Symptoms of SSRI discontinuation are usually short lived and most disappear within two weeks, however, as in our first case, even slow tapering of paroxetine would not relieve her symptoms (10). Overall, most cases have symptom relief by 21 days.

## Treatment

Serotonin dicontinuation syndrome is treated by reinstituting the same antidepressant or introducing another that is pharmacologically similar and symptoms will remit within 24 hours. Reassurance is another option since these symptoms are short-lived and not life-threatening. This was done in the second case presented and no adverse outcomes were noted.

Minimizing the syndrome is accomplished with a slow taper of the SSRI, especially with those agents that have shorter half-lives like paroxetine. In our first case, even a slower taper of the paroxetine was unable to prevent discontinuation symptoms, but replacing it with sertraline, a drug with a longer half-life, enabled the patient to eventually come off therapy with little distress. However, the authors of one report similar to ours here, noted that even a month long taper of paroxetine precipitated discontinuation symptoms, and suggested tapering by no more that 5 mg/week to prevent symptoms of discontinuation (11).

It has also been suggested that fluoxetine, because of its extended half-life and its active metabolite, norfluoxetine, protects against the emergence of discontinuation symptoms (12). This is analogous to the extended half-life benzodiazepines like chlordiazepoxide (Librium®) which have fewer serious withdrawal risks as compared to the shorter acting benzodiazepines like lorazepam (Ativan®).

## Conclusions

The literature clearly supports a discontinuation syndrome after SSRI therapy is stopped. This syndrome can occur when SSRIs are stopped abruptly, when doses are missed or forgotten, and even when doses are lowered.

Serotonin discontinuation syndrome must be discerned from a depression relapse; the symptoms patients report are new, generally short-lived, self-limited and certainly not life-threatening. However, there are reports that symptoms can be severe enough to prevent work. Generally symptoms are relieved by reinstitution of the antidepressant and tapering slowly. As in our first case, substituting an agent with a longer half-life can ease symptoms if the drug is gradually tapered off. This is probably best accomplished by substituting fluoxetine which has the longest half-life of the SSRIs.

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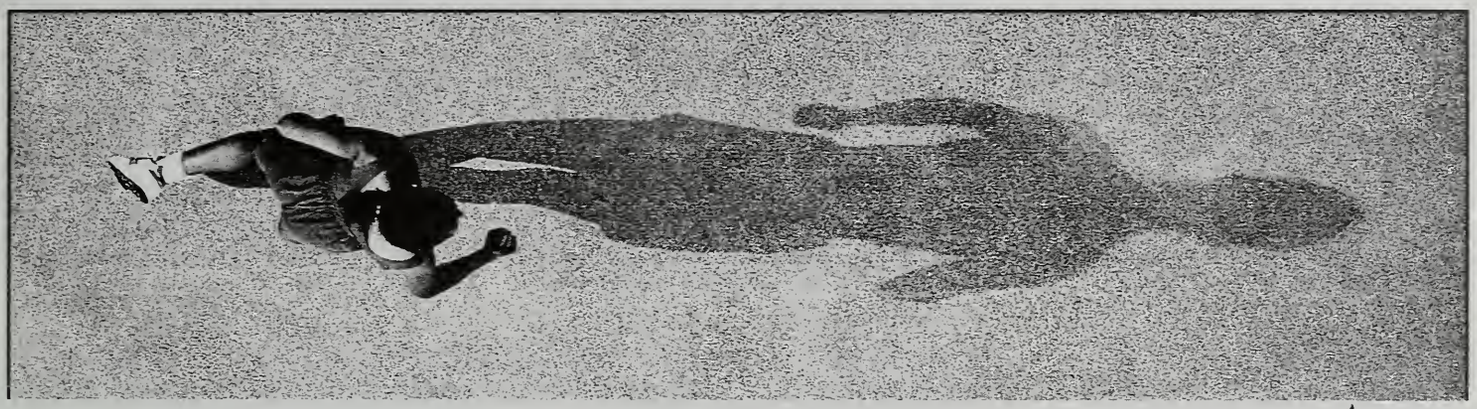

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*Charles E. Cox, M.D., F.A.C.S.*
Professor of Surgery, University of S. Florida College of Medicine; Program Leader, Comprehensive Breast Cancer Program; H. Lee Moffitt Cancer Center and Research Institute, Tampa Florida

Speakers from the West Virginia Chapter and residents from WV training programs will complete the program. The 50th Reception & Dinner will be Thursday, the golf tournament and reception Friday. There will be a $100 registration fee and 11 CME hours are available. For more information, contact Sharon Bartholomew at (304) 598-2802.
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# Cervical pathology in West Virginia adolescents

***HATIM OMAR, M.D.***
*Associate Professor and Director of Adolescent Medicine, Chandler Medical Center, University of Kentucky, Lexington, Ky.*

***PATRICIA CALLAHAN, MSIV***
*West Virginia University School of Medicine, Morgantown*

***SANU AGGARWAL, PRE-MED STUDENT***
*Vanderbilt University, Nashville, Tenn.*

***KATHALEEN PERKINS, M.D.***
*Section Chief and Associate Professor of Adolescent Medicine, Dept. of Pediatrics, West Virginia University School of Medicine, Morgantown*

***KATHY YOUNG, M.D.***
*Medicine/Pediatric Resident, West Virginia University School of Medicine, Morgantown*

## Abstract

***Cytologic screening is an important diagnostic tool used to detect precancerous and cancerous lesions of the cervix. We studied the prevalence of cervical abnormalities, based on Pap smear results, in patients at the Outpatient Adolescent Clinic at West Virginia University. We found a high incidence of overall intraepithelial cell pathology (24%) in this group with 2.4% high grade and 9.9% low-grade lesions. These findings show that major cervical pathology is present in this age group. Futhermore, repeat smears at intervals of < one year were performed on 317 patients. Of these repeat smears, 7% changed from normal to abnormal in this period. Sexually active adolescent females should have Pap smears at least annually to detect abnormalities that may otherwise not be detected until they are more advanced and difficult to manage. Higher risk adolescents may need semiannual screening.***

## Introduction

High-risk sexual behavior, inconsistent use of condoms and the immature anatomy of the female genital system contribute to potential cervical abnormalities in female adolescents. We studied the Pap smears of patients at the Outpatient Adolescent Clinic at West Virginia University to gain insight into how prevalent cervical abnormalities are in the female adolescent population.

Smears were collected from patients 12-19 years old over a four-year period. They were analyzed and classified according to the Bethesda System. In this system, lesions are classified as low grade SIL (CIN 1 and flat condyloma) high grade SIL (CIN 2 and CIN 3)(1).

Smears with inflammation are diagnosed as within normal limits, but if it is unclear whether squamous changes represent malignancy, they are then classified as atypical squamous cells of undetermined significance (ASCUS)(1).

## Materials and methods

A total of 1,479 pap smears obtained from 990 patients between the years of 1994 and 1997 were analyzed. Patients were 12-19 years of age and 96% of these patients reported being sexually active.

Results of these pap smears were categorized to determine the incidence of abnormal findings as classified in the Bethesda Grading System. Smears were obtained using a plastic spatula and cytobrush and processed as conventional pap smears.

## Results

A total of 1,479 Pap smears were performed on 990 patients, and 333 (22.62%) showed inflammation. Of these, 38 (2.56%) showed bacteria and 51 (3.46%) had fungi. ASCUS cells were present in 79 (5.36%) samples. Cervical dysplasia of varying degrees was found in 356 (24%) samples with 146 low grade, 36 high grade and 95 undetermined grade dysplasia (Table 1).

Repeat pap smears were obtained from 317 patients at approximately six-months. Of these patients, 10 (3%) had abnormal results on both samples, 272 (85%) were normal for both samples, 12 (4%) went from abnormal to normal, and 23 (7%) changed from normal to abnormal (Table 2).

## Discussion

The incidence of cervical dysplasia has been increasing since 1978, with more than 55,000 cases in the U.S. in 1996. There are now nearly 16,000 new cases of invasive cervical cancer reported annually (2,3).

Several risk factors are associated with increased risk for cervical cancer including early age of onset of sexual activity, large number of sexual partners, low socioeconomic background, multiparity and poor hygienic habits (4). Cancer of the cervix is a preventable disease. Early detection of asymptomatic lesions detected by the Papanicolaou smear and proper eradication of precursor cells eliminates disease in a majority of cases (5).

The Bethesda system of grading is currently used to classify the histopathology of lesions. In this system, lesions are classified as low grade SIL (formerly CIN 1 and flat condyloma), high grade SIL (CIN 2 and CIN 3)(6). Smears with inflammation are diagnosed as within normal limits unless it is unclear whether squamous changes represent malignancy in which case they are classified as (ASCUS)(7). It is believed that high grade SIL lesions will progress to cancer if untreated (7).

The false negative rate for the Pap smears is between 10%-20%, but it is still the best screening method available for detection of precancerous lesions (8). However, the current recommendations of Pap smears every three years after two consecutive normal Pap smears are inadequate to meet the screening needs of adolescents.

Cervical pathology is a common finding in sexually active adolescents. Abnormalities, such as cervical

**Table 1. Results of Pap Smears From 990 Patients (1,479 Smears).**

| | | |
|---|---|---|
| **Inflammation** | **22.62%** | **333** |
| **ASCUS** | **5.36%** | **79** |
| **Low grade** | **9.91%** | **146** |
| **High grade** | **2.44%** | **36** |
| **Reactive** | **4.75%** | **70** |
| **Dysplasia** | **6.45%** | **95** |
| **Total SIL** | **23.56%** | **347** |
| **Total** | **51.5%** | **759** |

***ASCUS: atypical squamous cells of undetermined significance***

***SIL: squamous intraepithelial lesion***

***Dysplasia: refers to dysplasia that is not classified as mild, moderate or severe***

**Table 2. Results of the 317 Pap Smears Repeated in < 1 Year.**

| | | |
|---|---|---|
| **Pap 1 N, Pap 2 N** | **86%** | **272** |
| **Pap 1 N, Pap 2 A** | **7.3%** | **23** |
| **Pap 1 A, Pap 2 N** | **4%** | **12** |
| **Pap 1 A, Pap 2 A** | **3%** | **10** |

***N: normal***

***A: abnormal***

***Pap 1: 1st Pap smear***

***Pap 2: 2nd Pap smear from same patient in less than one year***

dysplasia with potential development of more severe pathology is also prevalent in this group. Immaturity of the female genital tract, inconsistent condom use and high-risk sexual behavior, all place this age group at particularly high risk for cervical disease.

Our results, showing high incidence of atypia on pap smear and change from normal to abnormal within the same year, is in agreement with studies showing that major cervical pathology exists in this group (9). The unpredictable progression from earlier epithelial alterations to advanced abnormalities can vary from 1 to 20 years, with the more advanced form of CIN progressing to invasive cancer in less than one year (8,9). The incidence of cervical pathology in our adolescent population is even higher than that reported in another recent study (10).

Pap smear continues to be a safe, adequate screening method for early detection of cervical pathology. We believe that screening of all sexually active adolescents should be done at least annually in order to identify and begin treatment at the earliest possible stage of disease. Pap smears should be obtained even more frequently (semiannually) in high-risk adolescents to detect abnormalities that may otherwise not be detected until six months later when they could be more advanced and difficult to manage.

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# WVSMA's Mid-Winter Clinical Conference

***(Top left)*** **WSAZ reporter Kristin Emery interviews WVSMA President Dr. Phillip Stevens before the First Scientific Session at the WVSMA's Mid-Winter Clinical Conference at the Embassy Suites.** ***(Top right)*** **Dr. Sue Warren stresses a point during her lecture on *"Treating the Patient in the Final Hours."* *(Center)* WESPAC Chairman Dr. Douglas McKinney proudly presents Senator Martha Walker of Charleston with a check for her campaign for the U.S. Senate. Pictured with them are WVSMA President Dr. Phillip Stevens and WVSMA Vice President Dr. Ahmed Faheem.** ***(Bottom)*** **Dr. Jimmie Mangus talks with Charleston Daily Mail reporter Therese Cox at the exhibit booth for the WVU School of Medicine, Charleston Division. Pictured in the background is Guy Anderson of WVU with Dr. Joe Skaggs of Camcare.**

*(Top left)* **WVSMA President Dr. Phillip Stevens and his wife, Susan, visit with John Wiesendanger, vice president and CEO of WVMI, and Dr. Ron Stollings at the reception co-hosted by the WVU and Marshall University Schools of Medicine.**
*(Top right)* **Dr. Alvin Moss poses a question after the lectures on *"Prostate - PSA Screening/Diagnosis"* during the Second Scientific Session focusing on *"Controversies in Medicine."***
*(Center)* **Dr. David Hess talks with Tricia Clark and Sharon Seidler of Simpson & Osborne CPAs at their company's booth in the Exhibit Hall.** *(Bottom)* **Dr. Charles Tegeler IV of the Wake Forest University School of Medicine and WVSMA President Dr. Phillip Stevens listen to a lecture on telemedicine by Dr. James Brick during the First Scientific Session.**

***(Top left)*** **WVSMA Executive Director Evan Jenkins discussed the status of some of the health care bills at the Legislature during the briefing which was conducted at the conference.** ***(Top right)*** **At the reception sponsored by the WVU and Marshall University Schools of Medicine, Dr. Ron Stollings enjoyed spending time with his good friends Bill Baldwin, who entertained at the event, and Linda Holmes of the MU School of Medicine.** ***(Center)*** **Dr. William Carter presented a lecture on *"Congestive Heart Failure"* during the First Scientific Session.** ***(Bottom)*** **Dr. Mark Newbrough was one of the featured speakers for this year's Lunch & Learn which was entitled *"Alzheimer's Update."***


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***(Top left)*** **Judi Almond of the West Virginia Healthy Kids Coalition signs Dr. Bill Atkinson's door prize coupon as he visits the Coalition's booth in the Exhibit Hall.** ***(Top right)*** **Dr. Frank Schwartz of Parkersburg presented the lecture *"Diabetes in the New Millennium: Approaching the ADA Standards of Care"* during the Fourth Scientific Session.** ***(Center left)*** **Dr. David Chaffin Jr. responds to a question during the panel discussion which was held following his and Dr. Wayne Conover's lectures on *"C Section/VBAC"* for the Second Scientific Session on *"Controversies in Medicine."* Dr. Robert D'Alessandri, vice president for health sciences and dean of the WVU School of Medicine, was the moderator for this session.** ***(Center right)*** **Dr. David Gray was one of the lucky door prize winners at this year's conference.**

*(Top left)* Dr. Kenneth Fink of Huntington talks with Drs. James Lane, George Hogshead and William Revercomb following his lecture on *"Bipolar Disorder – Proper Diagnosis and Treatment Update,"* which he presented in honor of the late Dr. Lee Neilan of Charleston. *(Top right)* Dr. Dan Foster shakes hands with George Neilan, the husband of Dr. Lee Neilan, as he hands him an award in special memory of his wife's many contributions to the WVSMA. *(Center left)* At the conclusion of the *"Stump the Audience"* segment of the Fourth Scientific Session, Dr. Joe Reed visits with Dr. Dan Foster, chairman of the WVSMA's Mid-Winter Clinical Conference, and Dr. Robert Marshall and Dr. Warren Point, who moderated the Stump the Audience program. *(Center right)* Dr. Hong Zhang was the happy winner of a bottle of champagne at the door prize drawings.

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# Legislative Session 2000: A brief overview

The following is a synopsis of key health care issues and actions taken during the Legislature's Regular Session which ended March 11. For more details, see the final issue of *Legislative Update,* or to obtain a copy of a bill, phone 1-877-56-LEGIS and ask for the *"Enrolled Bill"* of your choice.

## The Provider Tax

After much work and effort by WVSMA lobbyists at the Capitol and by members making phone calls, the provider tax repeal failed once again. Though the bill made it further in the process then it ever has before, we are still faced with this unfair and burdensome tax for the coming year.

In the last hour, the bill came up for second reading on the House special calendar and then action on it was *"deferred."* The bill was not taken up again even though there was more than ample time to pass it. At its point of passage, this bill had been amended to include only physicians and dentists with the repeal to be stretched out over 10 years. The fiscal impact in 2001 would have been only about $2.9 million.

Sen. Walker introduced SB-474 on Feb. 14 repealing only physicians' tax incrementally over a five-year period. It was amended in the Senate Finance Committee to include chiropractors, optometrists and podiatrists, and the repeal period was extended to 10 years.

Subsequently, the bill was amended again on the Senate floor to also include nurses and community care agencies. SB-474 passed the Senate 34 to 0. Once it reached the House on March 3, it languished in House Finance for a week until the WVSMA was able to get it placed on the agenda and passed out on March 9. The bill was read a first time and recommitted to House Finance. Finally, it passed out of Finance again on March 10 and was placed on the Special Calendar for the next day – the last night of the session.

**Governor Cecil Underwood, WVSMA President Dr. Phillip Stevens and Dr. Dan Foster were three of the many individuals who spoke out and made presentations about why a tax should be placed on the wholesale price of smokeless tobacco products at the Public Hearing which was held at the State Capitol.**

When the bill came up for second reading, action on the bill was deferred. A vote was never taken.

## End-of-Life Decisions Bill

Alvin "Woody" Moss, M.D., of the Center for Health Ethics and Law at the WVU School of Medicine, calls HB-4144 the best health care bill passed by the Legislature this year. Dr. Moss and a subcommittee of the Guardianship Task Force drafted and supported the bill to facilitate end-of-life decision making by patients, families and health professionals.

The bill requires health providers to honor advance directives and it simplifies procedures for determination of incapacity and for resolving conflicts between directives. It includes a provision not to require hospice to train workers in CPR for terminally ill patients and it develops "user friendly" forms.

## State/Local Boards of Health

The Bureau for Public Health was successful in bringing about the passage of SB-542, the standardization and organization of responsibilities and powers of local boards of health and local health officers. The law will now mandate that local boards of health provide basic public health service in accordance with state public health performance-based standards in order to receive state funding.

These mandated basic public health services are *"...services that are necessary to protect the health of the public."* The three areas of basic public health services are communicable and reportable disease prevention and control, community health promotion, and environmental health protection.

The legislation also created a 16-member advisory council authorized to review all state public health rules and advise the

commissioner; standarized fees for public health violations, requires counties and municipalities to support their local health department, and streamlined the process for local boards of health to establish fees.

## Prompt Payment Act

The prompt payment bills that the WVSMA worked so hard on failed to pass either the House or the Senate.

**HB-4593** was introduced and referred to the Committee on Banking and Insurance. The bill passed out of the committee and then was referred to the House Government Organization Committee. There the bill died because of strong opposition from the insurance lobbyists and the Insurance Commissioner.

Another bill, **HB-4630**, relating to prompt payment was introduced by Del. Angotti in the final week, but this bill also did not make it out of committee. In the last few days of session, the WVSMA had introduced a resolution to study the issue during the interim. This resolution, **HCR-79**, did pass the House on the last night of session, but was sent to the Senate Rules Committee with a long list of other study resolutions and was never taken up for action by the Senate.

This does not mean though that the possibility of a study is a lost cause. Insurance Commissioner Hanley Clark and some legislators agreed to work during the interim to study the problems and develop legislation to be introduced next year. The WVSMA will be working to develop good sound legislation for next year.

## Bills Effectively Blocked

There were a few extremely bad bills introduced this year that, if passed, would have created a nightmare for physicians to practice medicine in WV.

**SB-633** would have made the confidential information gathered through the peer review process subject to subpoena in a court case. Also introduced was **SB-624**, which set out to repeal the section of the code relating to a cap for non-economic damages in medical liability action.

Another bill harmful to medicine was **SB-603**. This bill would have required lengthy data reporting relating to abortions performed by doctors and miscarriages treated by doctors. The information reported would have been made available to the public. Though the name of the patients would have been kept confidential, if such information were to be inadvertently disclosed by a physician, he/she would face felony charges and time in prison.

## WV CHIP Enters New Era

The Legislature has shown its overwhelming support for children by passing **SB-565**, wide-ranging CHIP legislation. Now, as many as 14,000 additional WV children will have an opportunity to receive high-quality, comprehensive health insurance.

Some of the new provisions include:

- Changing the name of the board to the Children's Health Insurance Board (from Children's Health Insurance Program Board).
- Expansion of the eligibility guidelines to include families with incomes up to 200% of the Federal Poverty Level (FPL). With the expansion, a family of four can earn up to about $33,000 and qualify their children for CHIP.
- Permissive language to allow the Board to include families with incomes greater than 200% of FPL through income disregard programs if conditions allow such an expansion.
- Cost sharing in the form of small co-pays for families with incomes greater than 150% of the FPL.
- The transfer of CHIP from the Dept. of Health and Human Resources to the Dept. of Administration.
- The CHIP director will become chairperson of the Board and two more board seats will be added.
- Language that permits health care providers to electronically submit applications.
- A permissive clause that allows the Board to examine and implement methods of extending WV CHIP to families and employers.

The final draft of the CHIP legislation was formalized in a conference committee composed of members of the Senate and House. The bill now awaits the governor's signature.

Many legislators deserve a great deal of credit for their hard work and dedication in promoting CHIP legislation especially Sen. Martha Walker, Del. Mary Pearl Compton, Del. Vicki Douglas and Del. Margarette Leach.

It will undoubtedly take some time for CHIP to be transferred from the Dept. of Health and Human Resources to the Dept. of Administration. Nonetheless, upon completion of the transfer, a newly expanded, more family friendly and more responsive program should be the result.

## Access to Eye Care Act Passes

The access to eye care act, **SB-167**, has been restricted to only individuals who are diagnosed with diabetes. It allows those patients to chose between an optometrist *or* ophthalmologist for their annual retinal exam.

If any abnormalities are found, they must be referred back to the primary care physician for additional direction.

## Smokeless Tobacco Bill Dies

After a monumental vote of the House, **HB-4504,** the smokeless tobacco tax, died a fiery death in the Senate. The bill would have placed a 17.5% tax on the wholesale price of smokeless tobacco products.

Language added to the bill on the House floor dedicated 30% of the revenues derived from the tax to the construction of a nursing home for veterans, with the remainder to go to tobacco use prevention and cessation.

The Senate Finance Committee killed it in a ceremonious manner. They deleted the amendment dedicating funds to the veterans' nursing home then postponed action on the bill indefinitely.

Though the smokeless tobacco tax failed to pass, there were a few positive tobacco related bills that did. Tobacco licensing legislation passed requiring tobacco retailers to now be licensed to sell the products. Commonly known as the *"contraband"* or *"gray-market"* bill, SB-475 was initially put forward by representatives of the tobacco industry. In essence, it prohibits the sale of cigarettes in West Virginia that were originally produced for export or those not meeting federal guidelines.

Tobacco control advocates were successful in amending the bill to include licensure of all tobacco retailers in the state. They hope this legislation will allow for the creation of a list of tobacco retailers, which will therefore facilitate compliance and control checks. The amendment was drafted directly from language that was in **HB-4593**, an early House version of tobacco licensure bill which died.

Also, with the passage of **HB-4183** the location of cigarette vending machines will now be restricted to areas that only people over the age of 18 can access, i.e. bars and clubs.

### Coverage for Colorectal Cancer Exams/Lab Tests

With the passage of **SB-481**, insurance carriers and HMOs can't deny payment for any non-symptomatic person over 50 or a symptomatic person under 50 for tests for colorectal cancer screening and diagnosis. This includes an annual fecal occult blood test, a flexible sigmoidoscopy repeated every five years; a colonoscopy every 10 years and double contrast barium enema repeated every five years.

### Needlestick Injury Prevention

Commonly known as the *"Needlestick Bill,"* **HB-4298** was pushed by the Nurse's Association and mandates that all hospitals, nursing homes, public health departments and home health agencies participate in needlestick injury prevention programs.

To minimize the risk of needlestick injuries to health care workers, these groups will be required to keep a sharps injury log, maintain a list of existing needless systems, and utilize additional needless systems. The bill also creates a needlestick prevention advisory council.

### Anatomical Gift Act Clarified

House Judiciary Chair Rick Staton spearheaded passage of **HB-4587**, known as the Anatomical Gift Act. The bill was recommended by the Center for Organ Recovery (CORE) and it was supported by all major health organizations.

This measure updates terminology and complies with recent federal standards. It enhances the ability of Health Care Surrogates and persons designated with a Medical Power of Attorney to make organ and tissue donations. The bill encourages organ and tissue donation by patients by having all hospitals provide organ and tissue donation information in their admissions packet and recording the donation in the medical record if the patient chooses to become a donor.

# PEIA, Medicaid agree to properly implement RBRVS

PEIA, Medicaid and Workers' Compensation officials met with WVSMA Executive Director Evan Jenkins to report on their efforts to fully implement the resource based relative value scale (RBRVS) payment schedule. This action follows the WVSMA's efforts to raise their awareness of the significant negative impact their reimbursement methodology was having on many physicians.

PEIA and Medicaid will implement the use of facility and non-facility based relative value units (RVUs) effective April 1, 2000 (dates of service on/after April 1, 2000). Each is adjusting their conversion factor to account for the change in the RVUs. The net effect is a projected 3%-4% overall increase in physician payments in PEIA and a projected 7 ½% physician payment increase in Medicaid. This is the first increase from Medicaid since 1994. Workers' Comp is not yet prepared to load the non-facility RVUs stating that enough data is not available to project the budgetary impact implementing the change would have.

The RBRVS payment schedule was first initiated by the federal government in 1992 for Medicare physician payments. In January 1999, HCFA began a transition to resource-based expense relative values that establish practice expense relative values for each CPT code that differ based on the site of service.

Services provided in a physician's office are assigned a non-facility practice expense RVU. In other words, if a physician performs a service in his/her office instead of a hospital setting, the new Medicare system will in many cases pay the physician more because the physician's practice has to absorb the expenses of performing the services.

The WVSMA learned last year that PEIA, Medicaid and Workers' Comp collectively decided not to fully implement this change as intended. These state agencies have been reimbursing physicians for any services performed, regardless of the site of service, at the facility (in most cases lower) practice expense RVU. This improper implementation of the new RBRVS schedule has resulted in fee reductions of greater than 50% in some cases. The subspecialties of allergy, oncology, dermatology, otolaryngology, gastroenterology and pulmonology were especially hard hit.

PEIA and Medicaid will be notifying physicians about the new payment plan.

## Supreme Court accepts case challenging $1 million damages cap

The WV Supreme Court of Appeals has agreed to hear an appeal challenging the $1 million cap on non-economic damages against health care providers. The case was originally heard in the Ohio County Circuit Court.

The jury returned a verdict against the defendant physician in the amount of $2,821,000. All but $21,000 of that amount was "non-economic" damages. The trial court reduced the award in accordance with the statutory limit to an amended amount of $1,021,000. With the difference of $1,800,000 at stake, the plaintiff's attorney appealed the case to the WV Supreme Court of Appeals hoping the court will rule the damages cap is unconstitutional. The $1 million cap was part of the Medical Professional Liability Act of 1986.

# Preliminary Program

**WVSMA Business Meeting, Embassy Suites Hotel, Charleston**

## Friday, April 14

5:30 p.m. — WVSMA Executive Committee Business Meeting
7 p.m. — WVSMA Council Business Meeting

## Saturday, April 15

8 - 9 a.m. — Delegate Registration

9:15 - Noon — **First Session of the WVSMA House of Delegates**

- 2000 WVSMA Award Presentations
- Constitution and By-Laws Committee Report
- Nomination Committee Report
- Announcement of 2000-2001 Candidates for Office
- Introduction of Resolutions
- 2000 Legislative Session Update

1 p.m. — Resolutions Committee Meeting Open/Closed
2 p.m. — Medical Education Committee Meeting
2 p.m. — Specialty Meetings

*Various chapters of West Virginia Specialty Societies will be scheduled for business meetings. Times and locations will be noted at a later date in the official program.*

3:30 p.m. — Scientific & Educational Sessions Committee Meeting
4:30 p.m. — WESPAC Meeting
6:30 p.m. — Reception

**A block of rooms are being held at the *Embassy Suites Hotel* for the WVSMA's Business Meeting April 14-16, 2000**
The room rate is only $104 and includes a complimentary full breakfast and a cocktail reception!!
**Please make your reservation by March 31, 2000**
**Call (304) 347-8700**

## Sunday, April 16

8 - 9 a.m. — Delegate Voting and Registration

9:15 a.m. — **Second Session of the WVSMA House of Delegates**

- Reaffirmation
- Necrology Report
- WVSMA Alliance President's Report
- WVSMA President's Report
- Announcement of Election Results
- Constitution and By-Laws Report
- Resolution Discussion, debate and delegate action

The Business Meeting is free and open to all members of the WVSMA. If you would like to attend, please call the WVSMA office at (304) 925-0342 or (800) 257-4747.
You can also e-mail us at misty@wvsma.com or register on-line at www.wvsma.com/upcomingmeetings.

# Bureau for Public Health News

*This page paid for by the West Virginia Bureau for Public Health.*

## Officials work together to mobilize threat of hepatis A

On Saturday, March 11, the public health community in the Northern Panhandle of West Virginia and in Charleston began an epidemiological investigation that would directly affect hundreds of people. Local health department officials swiftly and methodically made inquiries, gathered information and pooled resources when they discovered that a restaurant employee in downtown Wheeling was diagnosed with hepatitis A.

Simultaneously, state epidemiologists reviewed information, conferred with CDC officials, arranged technical assistance, and made emergency provisions with suppliers cross-country. Late that night, an update was hand carried from the Secretary of DHHR's office to the Ohio County delegation during the final minutes of the legislative session. The state's public health system was in action!

Sunday, March 12, the Bureau for Public Health in Charleston and the Wheeling-Ohio Health Dept. issued press releases advising the media and the public about the restaurant employee being diagnosed with hepatitis A. Food handlers who are unknowingly infected with hepatitis A can easily contaminate food that is not fully cooked. Careful evaluation is required to estimate the exact risk of transmission to the public. In this case, the food handler was involved in preparing several types of foods, such as salads, that are easily contaminated.

A variety of investigative measures were employed by Dr. William Mercer, chief health officer of the Wheeling-Ohio Health Dept., and his staff. They were able to make the determination that persons who ate food prepared at the restaurant on certain days between February 17 and March 2 were at risk of being exposed to hepatitis A.

The restaurant and its management were very cooperative with the investigation. Dr. Mercer and his staff learned that the majority of the restaurant's business was take-out and delivery. Since those orders were organized on the restaurant's computer, the restaurant was able to provide the Health Dept. with many of the names and addresses of people who might have been exposed to the virus.

Through this cooperative effort, officials were able to determine that between 600 and 800 persons could have been exposed. Meanwhile, the Bureau's epidemiologists within the Division of Surveillance and Disease Control placed an emergency order for immune globulin to be sent overnight from California to Wheeling. Plans were made to set up a clinic the following morning, Monday, March 13, at the Wheeling-Ohio Health Dept. to provide the IG injections.

Over the next three days, the Ohio-Wheeling Health Dept. administered immune globulin to around 750 people who were at risk of exposure. Amid intense media scrutiny, the local health department staff, state and regional Bureau for Public Health staff, restaurant management and Brooke and Marshall County Health Departments worked diligently to mobilize resources and respond to this significant public health threat.

The public health system effectively addressed the potential exposure of hepatitis A with education and treatment for hundreds of restaurant patrons. It also insured the safety of thousands of others by thoroughly investigating the source of exposure and insuring the safety of the food prepared at the restaurant.

The public health community is to be commended for their rapid and effective response to the situation in Wheeling. Also, it should be noted that the collective support of outside agencies like the Wheeling Civic Center and City Building maintenance staff, WV State Police, and local physicians and nurses was crucial to the success of this effort.

## Public Health Calendar

### April

Alcohol Awareness Month

Autism Awareness Month

Child Abuse Prevention Month

STD Awareness Month

Medical Lab Week (2-8)

Healthcare Access Personnel Week (3-9)

Public Health Week (3-9)

Infant Immunization Week (16-22)

Organ/Tissue Donor Awareness Week (16-22)

World Health Day (7)

March of Dimes WalkAmerica (29-30)

### May

Allergy and Asthma Awareness Month

Hepatitis Awareness Month

High Blood Pressure Month

Mental Health Month

Osteoporosis Prevention Month

Nurse's Week (6-12)

Safe Kids Week (6-13)

State AIDS Conference, Lakeview Resort (11-13)

Nursing Home Week (14-20)

Emergency Medical Services Week (14-21)

World No-Tobacco Day (31)

# CME & Special Events

## Camcare Health Educ. & Research Institute

***"Update on Osteopororis"***
April 5, 6 p.m., Albert Pfister, M.D., *(Fayette Co. Medical Society)*, Plateau Medical Center, Oak Hill

***"Obstetrics and Gynecology Update: Pre-conference for Family Physicians"***
April 6, 5 p.m. - 9 p.m., E. Reed Heywood, M.D., program chairman, Charleston House Holiday Inn, Charleston

***"Resident Research Day"***
April 11, 8 a.m. - 4:30 p.m., Michael J. Lewis, M.D., program chairman, Robert C. Byrd HSC of WVU, Charleston Division

***"Advanced Cardiac Life Support Renewal Course"***
April 14 or May 19, 8 a.m. - 4:30 p.m., Robert C. Byrd HSC of WVU, Charleston Division

***"Advanced Cardiac Life Support Provider Course"***
April 15-16 or May 20-21 or June 26-27, 8 a.m. - 4:30 p.m., Robert C. Byrd HSC of WVU, Charleston Division

***"Infertility Update"***
May 2, noon, Tamer M. Yalcinkaya, M.D., Camden Clark Hospital, Parkersburg

***"Herbal Medicine"***
May 3, 12:30 p.m., Shelda Martin, M.D., Montgomery General Hospital, Montgomery

## Huntington Medical Education Foundation

***"Pain Control in Patients with Cancer"***
April 12, 6 p.m., Kirti Jain, M.D., *(Tug Valley Med. Society)*, Starters Restaurant, Williamson

***"Advances in the Treatment of Chronic Sinusitis"***
April 12, 6 p.m., Arturo Roa, M.D., *(Logan Co. Med. Society)*, Kruger Medical Plaza, Logan

***"EMTALA 2000 Review"***
April 24, 6 p.m., Hoyt Burdick, M.D., and Paul Smith, J.D., *(Logan General Staff Meeting)*, Kruger Medical Plaza, Logan

***"Workup and Treatment of Thyroid Mass"***
April 25, 7 p.m., Mark Sheridan, M.D., *(Tri-County Medical Society)*, Physician Annex Building, Paintsville, Ky.,

***"Medical Malpractice: Reducing Risk"***
April 27, noon, Kathi Burton, M.S., F.A.S.H.R.M., Pleasant Valley Hospital, Point Pleasant

***"Monolayer Pap Smears"***
April 27, 7 p.m., Linda Brown, M.D., *(Lawrence Co. Med. Society)*, Grandview Inn and Suites, Southpoint, OH

## Marshall University School of Medicine

***"Hepatitis C: Management Dilemmas,"***
April 20, 1 p.m., Stephen Caldwell, M.D., Cabell Huntington Hospital, Huntington

***"Presymptomatic Management of Genetic Disorders"***
May 8, 6:30 p.m., Marybeth Hummel, M.D., Location TBA

***"Human Genome Project"***
May 9, 8 a.m., Marybeth Hummel, M.D., St. Mary's Hospital

***"MDS & Solid Tumors"***
June 5, 6:30 p.m., Azra Raza, M.D., Erickson Alumni Center, MU

## Robert C. Byrd HSC - Morgantown

***"Psychosocial Oncology Workshop"***
April 6-7, Robert C. Byrd HSC of WVU, Morgantown

***"15th Medicolegal Investigation of Death Seminar"***
April 15, Robert C. Byrd HSC of WVU, Morgantown

***"An Update on Upper Intestinal Disorders"***
May 4, Via Veneto, Clarksburg

***"Caring for the Caregiver in Your Practice: A Holistic Approach to People in Need"***
May 5-6, Robert C. Byrd HSC of WVU, Morgantown

***"AIDS in West Virginia 2000"***
May 11-13, Lakeview Resort and Conference Cntr., Morgantown

***"Sharpening Your Ethics Consultation Skills: An Update of Difficult Cases and Issues"***
May 12, Days Inn Conference Cntr., Flatwoods

***"11th Annual Otolaryngology Conference"***
June 23-24, Robert C. Byrd HSC of WVU, Morgantown

## West Virginia State Health Care Association

***"Medical Staff Directors Conference"***
April 14-15, Embassy Suites, Charleston

## West Virginia State Medical Association

***"2000 WVSMA Annual Business Meeting"***
April 14-16, Embassy Suites, Charleston

# Robert C. Byrd Health Sciences Center of West Virginia University News

## Dr. Julian Bailes to lead Neurosurgery

Bailes

Dr. Julian E. Bailes has been named chair of the Dept. of Neurosurgery.

Dr. Bailes led the cerebrovascular surgery program at Allegheny General Hospital in Pittsburgh from 1988-97, and he is nationally known for his clinical skills and research. The NFL Players Assn. chose him to lead a study of head injuries among professional football players, and he led a $21 million federal project to develop the National Medical Practice Knowledge Bank.

Since 1998, Dr. Bailes has been the director of neurosurgery at Celebration Health Hospital in Orlando, Fla. In Florida, he was also was on the faculty at the University of Central Florida, was medical director of the emergency medical services for Osceola County and was in private practice. During his years in Pittsburgh, Dr. Bailes was a part-time faculty member at WVU. He was also a leader in developing telemedicine in Pittsburgh, and a neurosurgical consultant to the Pittsburgh Steelers.

## Dr. McCombie named chair of OT

Dr. Randy McCombie, has been named chair of the division of occupational therapy in the WVU School of Medicine. He has been interim chair since 1998 and has been an asst. professor at WVU for five years.

A licensed occupational therapist, Dr. McCombie earned his Ph.D. from Loyola University, and his B.S. from College Misericordia in Dallas, Pa.

## Spratto named interim director of Cancer Center

Spratto

Dr. George Spratto has been named interim director of the Mary Babb Randolph Cancer Center. Dr. Spratto, who has been dean of WVU's School of Pharmacy since 1995, will handle both roles indefinitely. He replaces Dr. Fred Butcher, director of the new Blanchette Rockefeller Neurosciences Institute.

Dr. Spratto said his main goals will be recruiting faculty, networking with donors, and encouraging research.

## Conference on Rural Aging June 7-11

Charleston has been selected as the site of the First International Conference on Rural Aging, *"Rural Aging: A Global Challenge,"* June 7-11 at the Charleston Civic Center.

Conference organization has been the central activity of WVU's International Project on Rural Aging, 1997-2001, initiated as a result of a partnership formed between WVU's Center on Aging and the United Nations' Programme on Ageing in 1997.

"The Robert C. Byrd Health Sciences Center of West Virginia University takes great pride in its leadership role in the organization of this first International Conference on Rural Aging," said Dr. Robert M. D'Alessandri, vice president for health sciences at WVU and conference chair.

For more details, call (304) 293-0628 or visit the conference web site at www.hsc.wvu.edu/rural_aging.

## WVU, CDC release report on heart disease in women

Working in conjunction with the Centers for Disease Control, Dr. Elizabeth Barnett, director of the Office for Social Environment and Health Research (OSEAHR) and assistant professor of community medicine in the School of Medicine, has released *"Women and Heart Disease: An Atlas of Racial and Ethnic Disparities in Mortality."*

The book, distributed nationwide by the CDC, shows that West Virginia women suffer from far higher rates of heart disease deaths than women in other parts of the country. West Virginia ranked 49th out of the 50 states and the District of Columbia for heart disease mortality among women — only New York and Mississippi had higher death rates than West Virginia.

## Byrd secures funding for Eye Center

Sen. Robert C. Byrd has secured $3 million in federal funding to help finance WVU's new Eye Institute.

"One simply cannot put a value on what Sen. Byrd has meant to the state, especially when one considers the millions of lives he has touched by continuing to support WVU and the Robert C. Byrd Health Sciences Center," said Dr. Robert M. D'Alessandri, dean, School of Medicine and vice president for health sciences.

The Institute, under construction in a space next to the Physician Office Center, will be a state-of-the-art facility. It will house new exam rooms and equipment, including digital imaging for retinal disease, ultrasound, laser treatment, electrophysiology, corneal topography and glaucoma testing. There will be a separate children's eye care area.

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# Marshall University School of Medicine News

## Area's first endograft for AAA is performed

Dr. David Denning, chairman of surgery at Marshall, and Huntington radiologist Michael Korona, M.D., performed the Tri-State's first endograft surgery for abdominal aortic aneurysm on Feb. 29 at Cabell Huntington Hospital.

The endovascular procedure is less invasive than traditional repair, using two small incisions in the groin rather than the open surgery's full abdominal incision. With guidance from the radiologist, the surgeon threads the delivery catheter containing the vascular graft to the site of the aneurysm. The graft, made of polyester fabric and similar to grafts used for the traditional surgery, is then positioned within the aorta such that blood cannot enter the aneurysm. The graft is secured to the aorta using specially designed metal attachment systems that replace the sutures used to sew a conventional graft.

Patients remain in the hospital for two to three days, significantly less than the time required following traditional surgery. They typically are up and walking the day after surgery, and are back to normal activity levels within two weeks, compared to the six to eight weeks required for recovery after open surgical repair. Even with the metal hooks in place, patients can safely undergo an MRI.

According to Guidant Corporation, aneurysm rupture affects approximately 15,000 people per year, making it the 13th leading cause of death in the U.S. Aneurysms are four times more common in men than women and occur most often after 55 to 60 years of age. The incidence of aortic aneurysm disease is increasing each 10 years as the population ages. Early detection and diagnosis is increasingly possible as more sophisticated medical screening methods become available.

In addition to Drs. Denning and Korona, vascular surgeon Venkata Raman of Marshall also has the approved credentials to perform the endovascular repair at Cabell Huntington Hospital.

## New faculty member named director of Bateman Hospital

Erica Weinstein, M.D., M.B.A., has joined the Marshall faculty as a professor of psychiatry and as the new medical director for Mildred Bateman Hospital, according to Dr. Daniel Cowell, chairman of the Department of Psychiatry and Behavioral Medicine.

Dr. Weinstein brings unique credentials to the position, Dr. Cowell said. In addition to her M.B.A. training, Dr. Weinstein has a special interest in forensic psychiatry and spent seven years as assistant director of the Bellevue Hospital Forensic Psychiatric Service in New York.

Prior to joining the Marshall faculty, Dr. Weinstein had also been medical director of Ancora Psychiatric Hospital in Hammonton, N.J.; medical director of the Marlboro Psychiatric Hospital in Marlboro, N.J.; a supervising psychiatrist at the International Center for Disabilities in New York; and a staff psychiatrist for the Hillside Division of the Long Island Jewish Medical Center.

Dr. Weinstein received her M.D. degree magna cum laude from Downstate Medical Center in Brooklyn, New York, and her M.B.A. from the University of South Florida. She is a member of Alpha Omega Alpha. Her medical internship was at Beth Israel Hospital in New York and her psychiatry residency at Montefiore Hospital, where she became chief resident.

"I look forward to continuing to serve patients who have no other alternative, and providing them with the highest level of care, treatment and discharge planning," she said.

Dr. Weinstein said she looks forward to her teaching role, and also anticipates providing forensic evaluations in criminal and civil matters.

## Dr. Pino honored as *"hero of medicine"* by AMA leadership

The American Medical Association has invited Marshall pediatrician Isabel Pino, M.D., to be a featured speaker at its annual National Leadership Development Conference, which draws more than 1,000 medical leaders from around the nation and world.

The *"Pride in the Profession"* session in which she is to speak "features physicians whom the AMA recognizes as heroes of medicine and whose medical practice serves as a role model for others," the AMA said in extending the invitation. "Certainly, your efforts on behalf of your patients are consistent with these ideals and should serve to challenge our conference participants."

## Dr. Bateman profiled in national magazine

Dr. Mildred Mitchell-Bateman will be profiled in the Spring 2000 issue of *"A Mind Is..."*, the magazine of the United Negro College Fund.

Dr. Bateman was the founding chair of psychiatry at Marshall and served on the school's faculty until 1986. Her illustrious career in mental health has included serving as director of the West Virginia Dept. of Mental Health and as vice president of the American Psychiatric Association.

Dr. Bateman recently retired as clinical director of Huntington Hospital, which has now been renamed in her honor.

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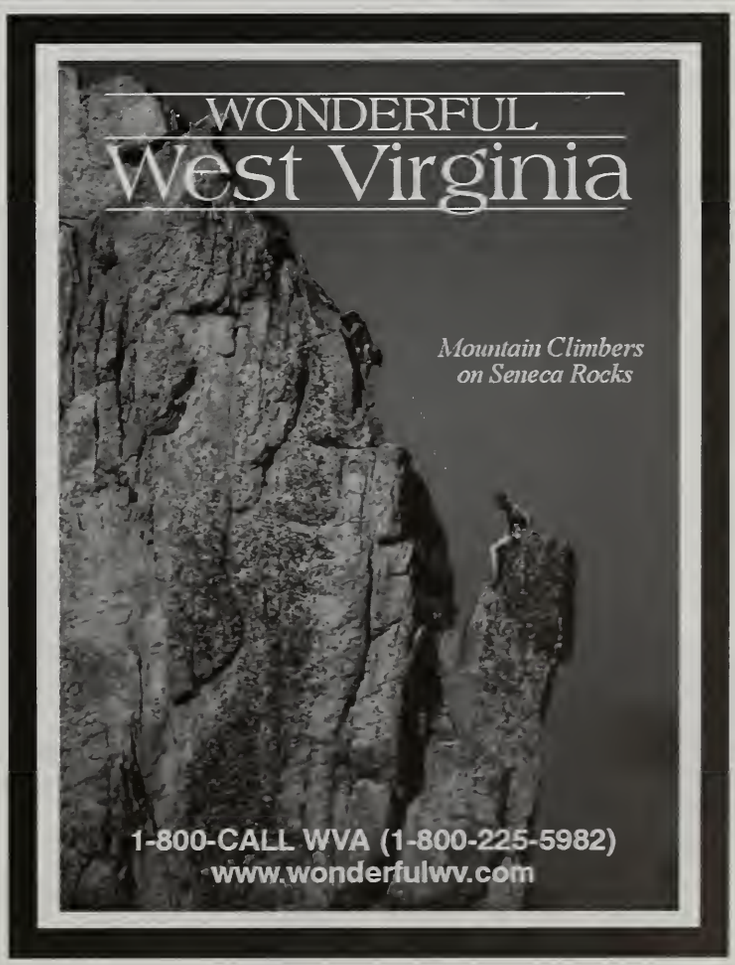

# West Virginia School of Osteopathic Medicine News

## Nemitz wins Professor of the Year

**WVSOM President Olen Jones, Ph.D. *(left)*, and Dean James Stookey, D.O. *(right)*, congratulate James Nemitz, Ph.D., for being honored as the *"Professor of the Year"* by the Faculty Merit Foundation of WV and Columbia Gas Transmission Corporation.**

James Nemitz, Ph.D., professor of anatomy at the West Virginia School of Osteopathic Medicine, was named the West Virginia *"Professor of the Year"* by the Faculty Merit Foundation of WV and Columbia Gas Transmission Corporation. He received the award at a banquet at the state Cultural Center in Charleston on Feb. 17.

"It is truly a great honor to be selected as the 1999 West Virginia Professor of the Year," Dr. Nemitz said. "I'll do my best to uphold the ideals of good teaching as I continue to serve the people of this great state. It has also been an honor to work at a supportive institution such as WVSOM and become a part of the osteopathic medical profession, a profession that has served this country — and especially this state — with honor and distinction."

Dr. Nemitz has taught at WVSOM for 16 years. Before joining the faculty, he conducted postdoctural research at the Yale University School of Medicine. He earned his bachelor's degree in biology from Randolph-Macon College, and his doctoral degree in anatomy from the Medical College of Virginia. He has won numerous awards and honors at WVSOM, including the President's Award of Excellence in Faculty Achievement in 1987, 1994 and 1999. He also serves as director of WVSOM's Office of Physician Underserved and Rural Retention.

## New residency program benefits students, state residents

A new residency program is underway at Ohio Valley Medical Center (OVMC) in Wheeling that benefits state residents, the hospital, and postgraduate students from WVSOM and other medical schools, officials at the hospital and medical school say.

"We established the Internal Medicine residency program — the first AOA-approved IM program in the state — in July of 1999," said Rick Greco, D.O., director of the IM residency program at OVMC. "The AOA allowed us to convert several interns in other tracks to the internal medicine track so that we could get the program going immediately instead of waiting until July 2000."

Dr. Greco, a 1986 graduate of WVSOM, stated that two interns — including Keith Poole, D.O., a 1999 WVSOM graduate from Wheeling — are currently enrolled in the IM residency program. John Martin, who is scheduled to graduate from WVSOM in May, will start the program in July. Greco says others will be added as matches are made in the coming months.

## Heart-sound simulator helps students gain essential skills

Thanks to a grant from the Dept. of Health and Human Services, WVSOM has purchased a CardioSim Digital Heart Sound Teaching System to help students become more proficient in listening to the heart and lungs.

The medical term for listening to the sounds of internal organs like the heart and lungs is "auscultation." According to Robert Foster, D.O., professor of family medicine and associate dean for clinical science at WVSOM, cardiac and breath sounds auscultation are key diagnostic skills which are essential for all primary care physicians.

"Auscultation has been described as the centerpiece of physical diagnosis and the symbol of bedside skills," says Dr. Foster. "Auscultation skills might be even more important to rural practitioners such as those in West Virginia and Appalachia, where doctors run across unusually high incidences of heart and pulmonary diseases.

"Rural areas may have less access to more sophisticated diagnostic testing and therefore require its primary care physicians to be more astute at bedside diagnosis."

WVSOM officials felt the previous heart-sound simulator was not adequately meeting the needs of its students. "It was important to us that we brought our equipment up to date to provide better training for our students and prepare them to tackle problems encountered in real patients," said Dr. Foster.

# Poetry Corner

## Computer Crash

Just one little error,
  and it all shut down.
Nothing now responding,
  and messages abound
with "error number this,"
  or "can't read that file."
And it seems to be full
  of mischief and guile.
The computer has crashed,
  all has come to a halt —
but it's nothing *I did,*
  so it's *not my fault!*
Though a lesson I've learned
  from this hapless crash:
always back up your files
  or they'll be lost in a flash.

*E. Leon Linger, M.D.*

## Balloon Fare

Aloft on jostled air,
steady they stream by,
above a speckled earth.

Balloons, bright colored,
game for lively crews,
going, gone —

catch as catch can.

*John Henry McWhorter, M.D.*

# Physicians, spouses effective lobbying teams

During this year's Legislative Session, Alliance members worked actively with physicians and WVSMA staff to fight for the issues which are critical to the practice of medicine in West Virginia — repealing the provider tax, increasing funds for tobacco prevention programs, placing an excise tax on smokeless tobacco, reforming the guarantee fund and enacting a prompt payment bill. Even though we were not successful in bringing about all the actions we worked for, we did make valuable strides through our contacts with legislators. However, if we are to have a real impact at the State Capitol, we have to have many more physicians and their spouses involved in the legislative process.

February 21 was White Coat Day for physicians at the Legislature. This year, the House of Delegates and Senate approved a resolution designating the third Monday in February each year as White Coat Day. We need to take great pride in this annual event and utilize it to its full potential. It is our day for physicians and their spouses to be heard by our lawmakers and **numbers do count**.

To succeed at achieving our legislative goals, the WVSMA and WVSMAA need to "get organized, develop a good game plan and fund it well." These are the three steps that have been emphasized by Dr. Phillip Stevens, president of the WVSMA. If every physician and their spouse would visit their legislators or call them on the phone at least once during the session, our impact would increase tremendously. In addition, it is critical that WESPAC contributions be made by both physicians and their spouses. When you are making a contribution, make one for your spouse as well, or have her/him contact the Alliance's WESPAC representative Kathy Fortunato at (304) 242-2032.

Just as any good marriage takes teamwork, so do our legislative efforts. Our actions today can help insure that the future generation of West Virginians will hopefully live in a healthier environment and still look up to medicine as a rewarding profession.

Rose Romero
President, WVSMA Alliance

# Obituaries

## Henry J. Pitsenberger, M.D.

Dr. Henry Joseph Pitsenberger, 79, of Montgomery, died Jan. 19 in Montgomery General Hospital.

Dr. Pitsenberger received his bachelor's and master's degrees from West Virginia University and a medical degree from the University of California-Irvine. He was an Army Air Corps medical officer for the Eighth Air Force B17 Squadron in England during World War II, and was a physican in the Belle and Montgomery areas for 30 years.

In addition to being a member of the WVSMA, Dr. Pitsenberger a member of the AMA, the American Academy of Family Physicians, Kanawha Medical Society, Montgomery United Methodist Church, and AF & AM 76, Summersville Lodge.

Surviving: wife, Helen Saxton Pitsenberger; sisters, Donna Schrader and Helen Williams of Hinton. He was preceded in death by parents, Lewis and Lila Amick Pitsenberger and son, H. Joseph Pitsenberger Jr.

The family suggests memorial contributions to Montgomery United Methodist Church, 319 5th Ave., Montgomery, WV 25136 or a charity of choice.

## Thomas L. Ritz, M.D.

Thomas L. Ritz, M.D., a Wheeling area physician for more than 30 years, died Sept. 30 at home.

A resident of Wheeling, Dr. Ritz was born on Nov. 9, 1933, in Wheeling, a son of the late Edward J. and Geraldine Holcomb Ritz. He graduated from Wheeling Central Catholic High School in 1951, was a graduate of the pioneer class at Wheeling Jesuit College in 1959, and received his medical degree from the West Virginia University School of Medicine in 1965.

Dr. Ritz began his medical practice as a family physician in Wheeling in 1967 and continued his medical practice until his death.

In addition to being a member of the WVSMA and the Ohio County Medical Society, Dr. Ritz was the past president of the West Virginia Chapter of the American Academy of Family Physicians. He was the former chief of family practice at Wheeling Hospital, and the fomer president of the medical-dental staff at Wheeling Hospital.

In 1990, Dr. Ritz was appointed to the faculty at the WVU School of Medicine after being selected for the Visiting Clinician Program, and most recently was an assistant professor at the WVU School of Medicine.. He was a member of Our Lady of Peace Catholic Church and the Ridge Runners Motorcycle Club.

Dr. Ritz is survived by his wife, Elizabeth Jane Collver Ritz; two sons, Stephen E. and his wife, Cindy, of Romney; Thomas L. and his wife, Sharon, of Morgantown; six daughters, Theresa A. Ritz of Wheeling, Nancy E. Ritz Michalko and her husband, George, of Buffalo, N.Y.; Janet L. Ritz Callahan and her husband, John, of Wheeling; Sharon C. Ritz Zelkowski and her husband, Larry, of Greensburg, Pa.; Carrie Ritz Brazell and her husband, Ken, of Phoenix, Ariz.; Paula D. Ritz Schegel and her husband, Charles, of Portsmouth, N.H.; two brothers, James Ritz and his wife, Marie, of Wheeling, John C. "Jack" Ritz of Florida; 20 grandchildren; a great grandchild; two nephews and a niece; several great nephews and nieces.

Memorial contributions may be made to Our Lady of Peace Catholic Church, 2 Allendale Road, Wheeling, WV 26003.

## Nettie Zell Elswick Pace

Nettie Zell Elswick Pace, 90, of Princeton, the wife of WVSMA past president Dr. Lawrence J. Pace, Sr., died Jan. 21 at her home.

Born in Jewell Ridge, Va., Sept. 24, 1909, Mrs. Pace was the daughter of the late Buena Vista and Louvica Reed Elswick. She was a 1931 graduate of of Richlands High School and received her license as a registered nurse from the University of Virginia in Charlottesville.

Mrs. Pace had been a resident of Princeton since 1937 when she moved there from Charlottesville. She and Dr. Pace had been married for 63 years. She was a member of the Sacred Heart Catholic Church in Princeton where she served on the Altar Society. She was also a member of the West Virginia State Medical Alliance and the Mercer County Medical Alliance, and was formerly involved in numerous social and civic activities in the area.

In addition to her parents, Mrs. Pace was preceded in death by one daughter, Veronica Lee Pace; one son, Lawrence J. Pace Jr.; nine brothers, William J., Thomas C., Powell S., John M., James O., Wade F., Walter M., Peery B. and Henry H. Elswick; two sisters, Lottie E. Daniels and Mary Elizabeth McClintock.

In addition to her husband, Mrs. Pace is survived by one daughter, Margaret A. Pace; one son, Charles W. Pace, and his wife, Connie, all of Princeton; one grandson, Charles W. Pace Jr., and his wife, Tiffany of Charleston; and one granddaughter, Cynthia Pace Jones, and her husband, Donnie, of Beaver; and one sister, Mayme Lee Cromer of Princeton.

Memorial contributions may be made to the Pace/Sacred Heart Catholic Church Trust, C/O One Valley Bank, NA, P.O. Box 5610, Princeton, WV 24740, or to Pam's Place, P.O. Box 1153, Princeton, WV 24740.

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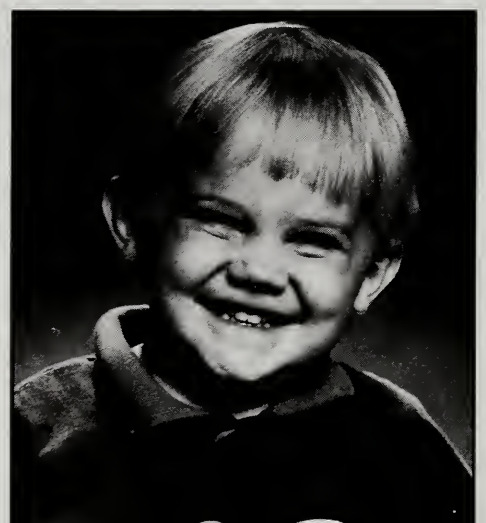


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Mary Babb Randolph
Cancer Center
West Virginia University

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*George L. Zaldivar, MD*
Program Chairman

**Pediatric Acute Care Conference**
Friday, Oct. 13, 2000
8 a.m. to 4:30 p.m.
Tamarack
Beckley, WV
*Manuel J. Caceres, MD*
Program Chairman

**Current Trends in Sleep Medicine**
Wednesday, Oct. 18, 2000
8 a.m. to 4:15 p.m.
Days Inn Conference Center
Flatwoods, WV
*George L. Zaldivar, MD*
Program Chairman

## Life Support Training

**Advanced Cardiac Life Support Provider Course**
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Sept. 30-Oct. 1, 2000
Nov. 17-18, 2000
Dec. 9-10, 2000
8 a.m. to 4:30 p.m.
Robert C. Byrd Health Sciences Center of West Virginia University/ Charleston Division, 4th Floor
Charleston, WV

**Advanced Cardiac Life Support Renewal Course**
Sept. 29, 2000
Nov. 16, 2000
Dec. 8, 2000
8 a.m. to 4:30 p.m.
Robert C. Byrd Health Sciences Center of West Virginia University/ Charleston Division, 4th Floor
Charleston, WV

**Pediatric Advanced Life Support Renewal Course**
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Nov. 17, 2000
Dec. 10, 2000
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*Kristy Lucas, PharmD*

**Pediatric Emergencies**
Tuesday, July 18, 2000
6:30 p.m.
Roane General Hospital
Spencer, WV
*Gordon Green, MD*

**Herbal Medicine**
Wednesday, July 26, 2000
Noon
Summers County ARH
Hinton, WV
*Shelda Martin, MD*

## Guest Lectures and Grand Rounds

**How to Mentor Students in the Research Process**
Research Lunch and Learn Series
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CAMC General Division/
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**Mills Falls on Birch River in Webster County.**

***Photo courtesy of Steven J. Shaluta, Jr., West Virginia Department of Commerce***

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# Manuscript Guidelines

All articles for the *West Virginia Medical Journal* must be submitted on an IBM compatible disk. Microsoft Word 97 is preferred, but other languages are acceptable. If the manuscript contains tables, the main body of the manuscript and references should be saved as one item, i.e., *article*, and then each table should also be saved as a separate item, i.e., *Table 1, Table 2.*

All scientific manuscripts should be prepared in accordance with *"Uniform Requirements for Manuscripts Submitted to Biomedical Journals."* Papers will not be considered for publication if they have already been published or are described in a manuscript submitted or accepted for publication elsewhere. All persons designated as authors should have participated enough in the work to take public responsibility for the concept.

Manuscripts should be accompanied by one extra copy, be double-spaced, have each page numbered and should include a title page, an abstract of no more than 150 words, and references numbered consecutively. No more than 10 references will be published and then a statement will appear that the author should be contacted for the other references listed in the manuscript.

Tables, figures and photos should be numbered, and indicated with parentheses whenever they are mentioned in the text, i.e. (Table 1), (Figure 1). Legends should be included for all figures and photographs.

Photos must be unmounted glossy prints in a 5 x 7 format or smaller. Black and white photos are preferred. Cost of printing photos in excess of four will be billed to the author at a cost of $13 for each photo. Each photo should have a label pasted on its back indicating its number, the author's name and an indication of its "top." Do not write on the back of photos, scratch or mar them with paper clips, or mount them on cardboard. Drawings and charts should be created in black and white.

All scientific material is reviewed by the editor and three members of the Publication Committee. Other articles are usually only reviewed by the editor. All articles should be addressed to:

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If you have questions or need more information, phone Nancy L. Hill, managing editor at (304) 925-0342.

# President's Page

## A victory for the common man?

The president of the AFL-CIO here in West Virginia recently stated that the results of the recent election were "a great victory for the common man!" He was referring to the election for the WV Supreme Court of Appeals.

As you are all aware, our Executive Director Evan Jenkins was defeated despite tremendous support from the medical community. He ran a good campaign and put in incredible hours, but victory was just not to be. *(The silver lining here is that we get to keep him as executive director.)*

Instead, former Supreme Court Justice and Speaker of the House Joseph Albright was elected, and current Supreme Court Justice Robin Davis was re-elected. They will join Justices Larry Starcher and Warren McGraw as well as a very beleagured Spike Maynard to form the new WV Supreme Court of Appeals. If the president of the AFL-CIO really believes this is a "great victory for the common man," then he is either unbelievably naive or he must also believe in the tooth fairy.

Oh sure, there will be a few common men (and women, too) who will hit the jackpot and win a lawsuit. But, the vast majority of West Virginians will not and we will all continue to labor under a system that is driving businesses out of the state - - businesses with high-paying jobs that constitute living wages with full benefits. We have all the minimum-wage jobs with no benefits that we need.

Over half of the cases that our Supreme Court agrees to hear are Workers' Compensation appeals. Over half!! This is ludicrous and a sham. It has made a mockery of our judicial system. I don't need to tell you the overwhelming percentage of these appeals that are decided in the claimant's favor. These cases are extremely lucrative for the plaintiff bar. The monthly compensation check in

most cases actually gets mailed to the lawyer first. He then takes out his "fair" share (up to 20%) and mails the rest on to the injured worker - - every month!

I am NOT making this up. What a system! Imagine, no bewildering codes to figure out. No denial letters. No waiting for weeks, months or years to get paid. Every month, every worker that the lawsuit lawyer has gotten on the workers' comp. gravy train gets his check mailed to the lawyer first. It is no wonder that businesses in droves are staying away from WV - - businesses with high wages and full benefits.

Now, you tell me, is this a victory for the common man? Or, is it really a victory for the lawsuit lawyers?

Our tort climate is also driving needed physicians out of the state and depriving rural areas of vital services. Currently, 50% of WV physicians who are covered by our state's leading malpractice carrier have lawsuits pending. 50%!! This is outrageous!! It is over five times the national average. The average award is over $2^1/_2$ times the national average and the number of multimillion dollar awards is going through the ceiling.

*(An article about West Virginia's serious malpractice situation by Dr. Derrill Crowe of Medical Assurance appears on p. 442.)*

High-risk specialists such as neurosurgeons and obstetricians are currently feeling the most heat, but all physicians are going to get burned. Many are retiring, quite a few are leaving. Wheeling may soon be without the services of a neurosurgeon. Head trauma patients will now have to be life-flighted to Pittsburgh, Morgantown, Columbus, who knows where. Precious hours will be lost and so will the lives of West Virginians. Some victory for the common man.

All of this is being orchestrated by our activist, politically-oriented Supreme Court justices through their outrageous rulings. The most recent being the Benavides case when the trial judge felt a grave miscarriage of justice had occurred and ordered a new trial. No way ruled our Supreme Court. The verdict and multimillion dollar award to a man who had been shown by videotape to have committed fraud would stand - - fairness and justice be damned. The very clear message from the Supreme Court to the plaintiff's bar is that open season has been declared on the physicians of WV - - and the lawsuit lawyers have responded in a spectacular fashion.

To be fair, the lawsuit lawyers are not trying to destroy our state, although they are. They are just greedy and the rewards of the system are potentially huge. Truth and justice can be horribly distorted when this much money is on the table.

However, all is not gloom and doom. Judge Risovitch in the Northern Panhandle was crushed in his re-election bid, so we have received some good news recently. In reality though, we are in a 15-round fight and we must answer the bell at the next round and come out with our fists flying.

Phillip R. Stevens, M.D.

# Editorial

# WV preserves the status quo to its detriment

*Editor's Note: This article was recently published in the Charleston Daily Mail and it is reprinted with permission.*

In December 1975, I arrived in West Virginia to work as a physician. Since then, my family has made friendships that are cherished dearly. We have neighbors who will help any way, any day, any time.

One frequently sees news about businesses closing and laying off employees. We read of longtime West Virginians dying in other states — or in state, with children living in other states.

Through all our interstates are now connected, it seems the only jobs created are those for painters of signs proclaiming "XYZ County is a Certified Business Location," which if, true, would be thriving with business activity.

Like it or not, West Virginia is shunned by the business community in this country. If businesses are willing to go to Virginia, where unemployment is 2 percent, and struggle to recruit workers, we've got to wonder why.

Do our leaders ask why a company with a chief executive officer from Charleston opens a 7,000-employee factory in Raleigh, N.C., where unemployment is 1.3 percent?

Coal and chemicals continue to decline as major contributors to jobs. Pittsburgh and Akron, once major steel and rubber hubs, lost significant amounts of their manufacturing, yet somehow boom as they attract other high-paying jobs.

But politicans running for election specialize in skirting our real problems, so I offer my thoughts:

• GOVERNMENT: State, local and federal governments employ one of four working West Virginians. We cannot finance their health insurance. Most receive relatively meager wages.

I'm sure there are lots of hard-working state employees, but it is difficult to imagine full-time jobs requiring 40 hours a week year-round in the Secretary of State's Office, Department of Agriculture or, for that matter, even the Governor's Press Office. We need to pay competitive wages and require competent and efficient work.

Let us begin with the Legislature. Members get paid approximately $15,000 a year plus expenses. They meet annually and never seem to finish their work on time, requiring special sessions that add to the expense.

Texas, with 20 million citizens, pays legislators $7,000 a year to meet only every other year. Special sessions are rare.

And in Kanawha County alone, there are over a dozen cities with multiple city halls and mayors. It is time to unify city and county governments.

• EDUCATION: Multiple state boards, two state universities and multiple state-supported colleges amount to meager faculty salaries, high turnover of teachers and a graduation rate of 56 percent at WVU and 38 percent at Marshall, compared to 84 percent at the University of North Carolina at Chapel Hill.

We need one university with multiple campus sites. We will then pay better salaries and provide more scholarships to students.

We have three medical schools in West Virginia. Only 40 percent of the graduates stay in state. We should keep one med school and have two or three clinical training sites. These can be managed such that every student can have free tuition, free books and free room and board on the condition they pledge to practice in West Virginia for at least 10 years after graduation.

Law School: Shut it down and save the money.

• WORKERS' COMP: Annual employee costs are four to five times that of bordering states.

I have never seen a disabled worker begging on the streets of Lexington. West Virginia gets a small engine plant from Toyota. Kentucky and Indiana get a 4,000-employee assembly plant.

Workers' Comp is acknowledged in private discussions as the biggest roadblock to economic growth in our state. Maybe it's time to look at what has been done in Kentucky.

According to the state Supreme Court, 60 percent of its caseload comes from Workers' Comp appeals. If these are reduced, maybe we could get along fine with just two or three judges.

• BUSINESS OWNERS: Businesses would reap tremendous productivity gains, declines in absenteeism and improvements in profitability if they would only provide some profit-sharing incentives to workers.

Also, whatever happened to summer hiring programs? High school and college kids with summer job opportunities will come back with appreciation.

The state provides a quality of life second to none. Business owners can go from home to work in 20 minutes and spend more time with their families.

Business incentives should be conditioned on employee stock ownership.

• PROFESSIONS: Physicians and hospitals need to work with businesses to lower the cost of health care, disability and sickness-related absenteeism. Physicians who hardly ever miss a day of work are only too quick to sign sickness excuses for their patients.

There is no place for so-called inconvenience lawsuits. Even when a company wins one, they are a burdensome cost of doing business.

*(Continued on next page)*

Will the items I have mentioned be accomplished in my lifetime?

Perhaps. Yet many selfish interests are working to preserve the status quo.

The foreseeable future for me, as I approach my golden years, is to look for the exit signs of the interstate highways and move where my kids will have jobs.

I am thinking of following Bob, Dan, Dallas, Alex and Sterl to other states and suffering the consequences of leaving many long-cherished friendships as I venture into unknown places.

With my move go the spending and taxes on my pension, Social Security and 401K monies in West Virginia.

West Virginians need to ask hard questions of candidates as the general election approaches.

What concrete steps will they take to keep us here with our friends and neighbors?

How can they help bring our kids home, where they would love to return, by providing them with well-paid job opportunities?

Bipin Avashia, M.D.
Charleston

# Letters To The Editor

## Studies needed on use of Viagra in women

For the past 20 years, research in the field of sexuality has received little scientific attention when compared to other fields of medicine. While there has been an increased focus on sexual dysfunction in men, there have been few studies devoted to the diagnosis and treatment of sexual dysfunction in women.

The incidence of antidepressant-related sexual dysfunction is understood to be much higher than once reported. It is now thought that between 30% to 60% of patients being treated with SSRIs (selective serotonin reuptake inhibitors) suffer from sexual dysfunction. The most common adverse effects with SSRIs are anorgasmia or delayed orgasm, followed by decreased libido. The frequency of antidepressant-related sexual dysfunction has been reported with equal incidence in men and women.

When attempting to establish possible connections betweeen antidepressants and sexual dysfunction, it is important to consider the role of depression in sexual disorders. It is estimated that 30%-70% of patients with depression suffer from primary (noniatrogenci) sexual dysfunction. Therefore, it is necessary to obtain a thorough history from the patient. According to Bonnie Saks, M.D., the assessment should include the following information:

(1) Baseline, premorbid sexual functioning;

(2) History of psychiatric or medical illness;

(3) History of substance abuse; and

(4) History of sexual functioning during the depressive illness but before initiation of antidepressant therapy

Sildenafil (Viagra), a-phosphodiespherase type 5 inhibitor, has become the most popular choice for the treatment of erectile disorder. Although systematic studies have not been conducted, there has been some speculation about the use of this medication to treat sexual dysfunction in women.

To test the effectiveness of sildenafil, we conducted a pilot study of eight women diagnosed with Major Depressive Disorder who were taking SSRIs. Each patient was prescribed oral sildenafil 50 mg. qd, prn after they completed a clinical interview and and signed a consent form. Within three months after starting the sildenafil, five of these women reported marked improvements in sexual functioning. Two women reported no improvement after taking the sildenafil, but it is interesting to note that these women were post menopausal and taking hormone replacement therapy. The other patient dropped out of the study after identifying a history of childhood sexual abuse as the primary reason for lack of libido. All of the five subjects who reported an improvement in sexual function after taking sildenafil reported normal sexual functioning prior to being treated with an SSRI.

Our study provides encouragement for the treatment of SSRI-induced sexual dysfunction in women. Further placebo controlled studies need to be conducted for validity and reliability of test results.

M. Khalid Hasan, M.D., F.A.P.A.
Francie E. Anderson, M.A., L.P.C., L.S.W.
Raleigh Psychiatric Services, Inc.
Beckley

# Physicians "correct" rather than "collect"

*Editor's Note: This letter was recently published in the Charleston Daily Mail and is reprinted with permission.*

Attorney Richard Lindsay's (aka"M.D.") letter in the editorial section of the Charleston Daily Mail March 30, 2000, was both amusing and fascinating. Attorney Lindsay is apparently appalled at the medical profession's reluctance to openly and voluntarily admit to one's own or accuse colleagues of negligence, disabilities, etc. Although his criticisms are portrayed as originating from one belonging to the active medical profession, in actuality, one of his primary professional activities is to collect sums of money from healthcare professions insurance companies through lawsuits for alleged negligence. The validity of his professional conduct is not necessarily in question, but I believe he is no longer involved in the practice of medicine, a fact for which I am personally grateful.

Futhermore, Attorney Lindsay's comments are not only misleading, but inaccurate. If he had investigated his subject matter a little more thoroughly he would have realized that a few years ago, as Chairman of the Department of Orthopaedics at a local hospital, I recommended the suspension of a member of our department for unacceptable professional conduct. Shortly thereafter I was the recipient of a $2,000,000 lawsuit against me personally by the individual who was suspended and who was represented by a "reputable" large local law firm. My liability insurance carrier did not protect me against such a lawsuit, so I was personally exposed for the $2,000,000. After I sat through 28 depositions and a year and a half had past, the lawsuit was dropped and the suspended physician was forced to leave West Virginia. However, I was left with a most unfavorable and cynical opinion of how Attorney Lindsay's system works.

Unfortunately, Attorney Lindsay's pontificate advice to the medical profession is self-serving and undermines its credibility. As imperfect as we doctors are, we devote, without compensation, an enormous amount of time and effort to issues of quality wherein our motives are to "correct" rather than "collect."

David A. Santrock, M.D.
Charleston

# Study looks at *Strongyloides, Giardia* cases

Although several papers have discussed *Strongyloides stercoralis* infections in Kentucky and Tennessee residents, the only published investigation of strongyloidiasis in West Virginia was a study (published in 1967) reporting an incidence of 9 out of 200 consecutive patients at the Beckley Veterans Administration Hospital between May 14 and July 14, 1961. Since the microbiology laboratory of the Charleston Area Medical Center (CAMC) reported ongoing instances of *Strongyloides* larvae and *Giardia* parasites in patient samples, we undertook an investigation to determine the number of strongyloidiasis and giardiasis cases at CAMC.

We reviewed 1997 and 1998 CAMC laboratory logbooks documenting results of ova and parasite examinations of stool or sputum specimens requested by physicians. These specimens (4,566 total) were processed by concentration techniques followed by iodine stained smear examination. A request to the CAMC Medical Records Dept. to identify patient records that listed strongyloidiasis as a discharge diagnosis turned up one additional 1997 case of strongyloidiasis in whom *Strongyloides* larvae were only found on the sputum culture plates. CAMC inpatient records were reviewed for the *Strongyloides*-positive cases, all of whom had been hospitalized. Few *Giardia*-positive patients had been hospitalized.

We identified 20 cases of *Strongyloides* infection and 22 cases of *Giardia* infection over the two-year period. (Other intestinal worms and parasites were infrequently identified.) None of the patients were infected with both *Strongyloides* and *Giardia*. Mean and median ages at the time of diagnosis were 73.6 and 74.5 years respectively for the *Strongyloides* patients vs. 20.6 and 10 years for the *Giardia* infected patients (2-tailed $p < 0.01$, Wilcoxon rank-sum test). The percentages of male patients were 70 percent (*Strongyloides*) vs. 36 percent (*Giardia*) ($p = .029$, Pearson chi-square test).

The results of this study parallel the 1981 data of Milder et al from Kentucky which showed that *Strongyloides*-positive cases were predominantly found in older men. The higher hospitalization rates among the *Strongyloides*-infected patients compared to the *Giardia*-infected patients may reflect older age and/or the presence of co-morbid diseases in this population, as well as the potential of *Strongyloides* infection to cause serious illness or death. There is a possible link between strongyloidiasis and vancomycin-resistant *Enterococcus* stool culture positivity at CAMC.

Lynn W. Kitchen, M.D., M.P.H., D.T.M.&H.
Washington, D.C.

Kevin K. Tu, Ph.D.
Charleston Area Medical Center
Charleston

Fred T. Kerns, M.D.
Charleston

Special Report

# The frightening malpractice picture in WV

**DERRILL CROWE, M.D.**
*Chairman, Medical Assurance, Inc., Birmingham, Ala.*

***Editor's Note: This article is a synopsis of a speech presented by Dr. Crowe on Saturday, April 14 during the First Session of the WVSMA's Annual Business Meeting at the Embassy Suites in Charleston.***

West Virginia's liability climate is in crisis. Medical Assurance's statistics show that the company has received one lawsuit for every two physicians it insures in West Virginia, whereas in neighboring Ohio, the company has one lawsuit for every five insured. Clearly, something is out of whack in West Virginia.

The average malpractice payment nationwide is $225,000, whereas in West Virginia, the average loss is $535,000 - - roughly twice the national average. In the state's Northern Panhandle, the average loss is $1 million. In addition, the Northern Panhandle accounts for 40% of Medical Assurance paid losses and verdicts, yet represents 13% of its insureds.

Despite the explosion of litigation and the eruption of large losses, Medical Assurance remains committed to the state. There have been more than a dozen losses of $1 million or more in the last two years, with two losses of $2 million and one case lost for more than $3 million. At least two carriers have left the state in the past because of the problem, and at least one carrier may now be exiting at least the Northern Panhandle.

As with any complex problem there are complex solutions. Medical Assurance's strategy of vigorously defending non-meritorious lawsuits will help deter frivolous litigation in the long-run but won't have much effect in the short-term, so West Virginia physicians can expect higher premiums to reflect the higher risk. Recall the problems faced by companies that sold cut-rate malpractice insurance in our state: PIE is bankrupt and MMI was forced to add millions to reserves and was eventually bought out by a competitor.

But the real answer is bringing about a change in the West Virginia's legal system. As Medical Assurance helps in the courtroom, physicians must address this dangerous trend by becoming involved in the political process, individually and collectively, thus committing the medical community to changing the system.

The difference *can* be made in the courts. The fact is that West Virginia juries are more apt to award huge verdicts, and the state's Supreme Court is less likely to rule in favor of physician defendants, a scary combination. The much publicized Benavides case is a prime example. As you are aware, the plaintiff was awarded nearly $2.2 million for his claims of disabling injuries. After the trial, the plaintiff was videotaped performing a number of activities that called his injuries into question. The trial judge ordered a new trial based upon the finding that the plaintiff had perpetrated fraud upon the court, but the West Virginia Supreme Court overruled the trial court judge who presumably was in the best position to understand the matter. Medical Assurance is appealing the case to the United States Supreme Court.

As bad as things are in West Virginia's judicial environment, they could be even worse. The caps on damages that have served to moderate several outrageous verdicts are now being challenged in the court. Think how much worse the problem could be if they are overturned, and at least one sitting justice has clearly indicated intentions in that regard.

The deck is stacked for the plaintiff in other ways too. West Virginia is perhaps the only state in which the so called *"Dead Man's"* Statute has been applied to medical liability cases. Under this doctrine, the only evidence permitted in a death case is that which was written down or can otherwise be corroborated. No testimony is permitted about what was said, no pattern of practice can be established to help bolster a case. In short, if it isn't written down, it's not likely to be allowed in court — and how often do you write down every detail of every conversation with a patient?

Did you know that plaintiffs who win a lawsuit may then turn around and sue your malpractice insurer for not settling the case prior to trial? If they receive a settlement, they may similarly be allowed to sue the insurer. If the ultimate judgment or settlement is for more than was offered on the physician's behalf - - even if it was less than the plaintiff's lowest demand - - the Unfair Claims Settlement Practices Act makes that possible in West Virginia. Again, the tables are clearly tilted for the plaintiffs in our state.

West Virginia physicians are now presented with two choices: do nothing and suffer the consequences of a climate of distrust between physicians and patients or make a long-term commitment of money *and* time to ensure that we have fair-minded juries and judges who will return just verdicts when the realities of today's medical environment are understood. This climate of malpractice litigation cannot be ignored any longer. The time has come for the entire medical community to get actively involved and confront this system.

# Special Article

# WVSMA launches Health Programs Initiative

***HELEN M. MATHENY, M.S., A.P.R.***
*Director of Health Programs, WVSMA, Charleston*

The West Virginia State Medical Association's purpose is to promote high standards of medical education, extend medical knowledge, advocate on behalf of physicians and their patients, and improve the health of West Virginians. In order to coordinate and enhance efforts to improve the health of West Virginians, the WVSMA has launched a health programs initiative.

This new initiative focuses on health promotion and disease prevention efforts in which our members' medical expertise will benefit all West Virginians. Our health promotion efforts will include not only educational activities but also advocacy, policy development, economic supports, and multifaceted programs. We will collaborate with public and private organizations to produce measurable improvements in the health status of West Virginians.

The systematic approach for the WVSMA's health programs includes:

- Compiling West Virginia health statistics data and perceptions about the greatest health issues;
- Identifying the health issue(s) to address;
- Analyzing the issue(s) by compiling baseline data, conducting a literature review, and researching existing programs through the state that address the health issue;
- Developing an action plan with short- and long-term measurable objectives; and
- Implementing the action plan and tracking outcomes.

More than 300 WVSMA members completed the West Virginia health promotion needs assessment survey to help identify areas of focus for our health programs.

When asked, "What do you consider to be the most critical health care issue facing West Virginians?" the most frequently cited responses were tobacco use, obesity and an uninsured population. When respondents were asked to list "the single most important action that can be taken to improve the health of West Virginians," the most frequent responses were smoking cessation and education about healthy behaviors. Additionally, the following three areas were identified as the most urgently needed health promotion/disease prevention effort:

- tobacco/smoking cessation;
- promotion of a healthy lifestyle; and
- education about cardiovascular risk factors.

The key findings of the health promotion needs assessment and West Virginia health statistics will be available on the WVSMA website at www.wvsma.com on the "Health Programs" page.

What are the health programs in which the WVSMA is currently taking an active role?

The WVSMA has a leadership position in the Coalition for a Tobacco-free West Virginia, and WVSMA member Dan Foster, M.D., has served as the coalition chairman for the past two years. The WVSMA also is working with the West Virginia Chapter of the American Academy of Family Physicians and the West Virginia Hospital Association on programs related to tobacco cessation. In addition, the WVSMA is helping to establish the West Virginia Comprehensive Cancer Control Coalition.

A 1998 statewide public opinion poll reported that West Virginians consider their personal physician to be the most trustworthy source of information about health and medical research issues. As a state association, we have a wonderful opportunity to bring the combined talents and skills of West Virginia physicians to address health promotion and disease prevention issues.

If you would like to receive e-mail updates about health promotion issues and activities, please e-mail Helen Matheny at helen@wvsma.com.

# Influenza immunization and mortality among diabetic Medicare beneficiaries in West Virginia

*CHARLES P. SCHADE, M.D., M.P.H.*

*MARC A. MCCOMBS, M.A.*

*West Virginia Medical Institute, Charleston*

## Abstract

***This study estimated the increased risk of death among Medicare beneficiaries with diabetes in West Virginia who do not receive influenza beneficiaries with diabetes. Medicare beneficiaries with diabetes who did not have claims for influenza vaccination had approximately a 1.7-fold risk of death during a subsequent influenza season, compared with those with a vaccination. This risk was observed in all age and sex subgroups, and was changed very little by adjustment for comorbidity. The adjusted odds ratio for death in the vaccinated group (compared with the unvaccinated group) during the 1996-97 influenza season was 0.639 (95% confidence interval 0.565-0.722); in 1997-98 it was 0.601 (95% confidence interval 0.527-0.687). West Virginia Medicare beneficiaries with diabetes are at a significantly increased risk of death during an influenza season if they do not have prior claims for influenza vaccination.***

## Introduction

Diabetes is highly prevalent in older individuals. In West Virginia, one in eight people over age 65 has been diagnosed with the disease, according to the WV Bureau for Public Health (1).

Uncontrolled diabetes can lead to eye, nerve, and kidney damage, and even to death (2). Diabetes also interferes with the immune response to acute infection, creating an increased susceptibility to infectious diseases such as influenza, and influenza infection can worsen glycemic control in diabetes (3). Experts recommend annual influenza vaccine to people "...who have required regular medical follow-up or hospitalization during the preceding year because of chronic metabolic diseases (including diabetes mellitus...)" (4).

Since the WV rates of influenza immunization among elderly people have lagged behind national rates, as measured by claims (5) and surveys (6), we suspected that diabetics also may not be receiving immunizations as recommended. To improve use of preventive services among people with diabetes, we studied rates of influenza vaccination in Medicare beneficiaries with diabetes in WV and death rates for those receiving and not receiving vaccine during subsequent influenza seasons.

## Materials and methods

The study population was all Medicare beneficiaries ages 65-114 as of Sept.. 1, 1996, who had been discharged from a WV hospital between Jan. 1, 1995 and Dec. 31, 1997 with any diagnosis of diabetes (ICD9 codes 250-250.99).

To identify this population, we compiled Medicare Part A hospital claims data for WV. We used two special files of Medicare outpatient influenza vaccine claims data for WV Medicare beneficiaries in 1996 (7) and 1997 (8) to identify beneficiaries who had claims for influenza vaccine from September 1 and December 31 in each year (the 1996 and 1997 "flu files"). Although the flu files were provisional data, record totals agree with published final HCFA data for both years for immunization claims in Medicare beneficiaries ages 65-114 in WV (9,10).

To validate the diabetes patient file, we used a set of HCFA-supplied Medicare Part B claims for 1996 from WV. This data set consisted of 365,191 outpatient claims for 68,974 unique beneficiaries in the state's beneficiary data base (the validation file). These outpatient claims were selected because they had a diagnosis of diabetes mellitus coded in any position or one of a limited number of diabetes related diagnoses (e.g., diabetic retinopathy).

We defined an "influenza vaccination period" as September 1 through December 31 of a particular year. We defined the "subsequent influenza season" as the six-month period beginning October 1 of the year of the influenza vaccination period and ending March 31 of the following year. We compared statewide influenza vaccination claims rates among study population members with reported rates for all Medicare beneficiaries.

To obtain dates of death among study population members who had died by July 1, 1998, we matched flu files for each year to a subset of the Medicare Enrollment Data Base for WV. We used the published denominator data for WV (11) in calculating influenza claims rates for each year. We tabulated death rates for patients

in the study population who were alive at the start of an influenza vaccination period by age, sex, and claim for influenza vaccine for time intervals beginning with the influenza vaccination period.

For the 1996 influenza vaccination period, we computed actuarial survival curves and mortality hazard as a function of time following opportunity to immunize, using the Statistical Analysis System (SAS) LIFETEST procedure (12), counting time from the earliest opportunity to immunize (September of the flu shot season) in increments of 30 days. We adjusted the denominator of the hazard rate calculation for the first three months to reflect the number of beneficiaries immunized by September because not all beneficiaries had received immunizations in that month.

Since each Medicare beneficiary is assigned a unique identification number, we derived the unique identification number for each claim in the diabetes file and in the validation file using the HCFA Beneficiary Cross Reference Table for WV. We used the unique identification number to match beneficiaries with claims in the validation file to those represented in the diabetes patient file. We counted the number of beneficiaries in the diabetes patient file who had a claim in the validation file.

For each patient in the study, we counted the number of times a diagnosis of diabetes was entered in a West Virginia Medicare Part A hospital discharge summary from Jan. 1, 1995 to Dec. 31, 1998. We used this to develop an index of the severity of the beneficiary's diabetes. The index was the number of times a diagnosis of diabetes was recorded divided by the number of years of observation (three years, if the beneficiary was alive on Dec. 31, 1997, otherwise the number of years between Jan. 1, 1995 and Dec. 31, 1997). After preliminary univariate analysis revealed this variable's highly skewed distribution, we used its natural logarithm in multivariate analyses.

We included four co-morbidity indicators known to be common in the study population and related to diabetes or influenza/pneumonia mortality risk. We counted the number of times each comorbid condition appeared as a diagnosis on a hospital discharge summary in 1995-97 for each patient. After preliminary tabulation, we placed these comorbidity indicators into three categories:

0 (no occurrences),
1 (exactly one occurrence); and
2 (two or more occurrences)

To document increased risk for death or hospitalization during the two influenza seasons studied (1996-97 and 1997-98), we plotted hospital discharges of WV Medicare beneficiaries, ages 65-114, admitted to acute care hospitals with a principal diagnosis of pneumonia and influenza (P&I: ICD9 codes 480-487.9) from every month from January 1995 through July 1998. We also plotted monthly P&I deaths in the hospital over the same period. In addition, data was obtained on the severity of influenza epidemics in the U.S. from published reports (13,14).

Using multiple logistic regression (SAS LOGISTIC procedure (12), we modeled the probability of death during the subsequent influenza seasons from 1996 and 1997 vaccination periods as a function of demographics (age and sex), severity of diabetes, comorbidity, and whether an influenza vaccine claim was filed for the patient. We used backwards selection with a significance level of 0.05 for inclusion in the models.

**Table 1. Mantel-Haenszel Pooled Relative Risk of Death During for WV Medicare Beneficiaries With Diabetes Without Influenza Vaccine Claims Compared With Those Having Influenza Vaccine Claims During 1996 and 1997.**

| Year | Relative Risk | 95% Confidence Interval |
|---|---|---|
| 1996 | 1.75 | 1.58-1.94 |
| 1997 | 1.72 | 1.55-1.90 |

## Results

We identified 39,744 beneficiaries who met the definition for diabetes in the three-year period; 31,125 were between 65 and 114 years old on Jan. 1, 1995. Our study population was somewhat older, and had a greater proportion of females than the state's overall beneficiary population. A total of 24,847 of the 34,732 diabetes patients alive on Sept. 1, 1996 were also found in the validation file.

Of these beneficiaries presumed to have diabetes, 26,443 were alive as of Sept. 1, 1996, and 23,839 remained alive a year later. During the 1996 influenza vaccination period, 9,533 (36.0%) of these beneficiaries with diabetes had claims for influenza vaccination, vs. 37% of all beneficiaries in WV. For the 1997 period, the rates were 37.2% and 39.1% respectively.

Pneumonia and influenza admissions and deaths for all Medicare beneficiaries showed marked winter seasonality for both years. This reflected data from the Centers for Disease Control, which also showed influenza outbreaks were widespread during these years.

Of 15,471 beneficiaries presumed to have diabetes without influenza vaccine claims in 1996, 1,438 (8.5%) died during the subsequent influenza season, compared with 451 (4.7%) of 9,030 with claims. In 1997, results were similar: 1,326 (9.2%) of 13,010 without vaccine claims died, vs. 442 (5.2%) of 8,059 who had such claims. Stratification by age and sex showed these results held in all age and sex strata. The Mantel-Haenszel pooled relative risk of death in beneficiaries without claims for influenza vaccine compared with beneficiaries who had vaccine claims was approximately 1.7 both years (Table 1). The temporal pattern of death rates in people with and without vaccine claims observed following the 1996 influenza period is illustrated in Figure 1. The actuarial survival analysis for 1996 strongly suggested influenza vaccination claims were associated with survival. The hazard rate for death in the subgroup with vaccine claims was less than half

of that in the subgroup without claims immediately following the opportunity to vaccinate; during the year following the influenza vaccination season, it increased to a level indistinguishable from the rate for those without claims.

Results of multiple logistic regression, modeling probability of death during an influenza season, are shown in Tables 2 and 3. The adjusted odds ratio for death in the vaccinated group (compared with the unvaccinated group) during the 1996-97 influenza season was 0.639 (95% confidence interval 0.565-0.722); in 1997-98 it was 0.601 (95% confidence interval 0.527-0.687). Most covariates were significant, although congestive heart failure dropped out of the model both years, and COPD dropped out in 1997. In both years, influenza vaccine claims were associated with reduced odds of death. Increasing age, male sex, and diabetes events per year were associated with increased odds of death. Both models had excellent predictive properties; the c statistics in 1996 and 1997 were 0.904 and 0.912, respectively.

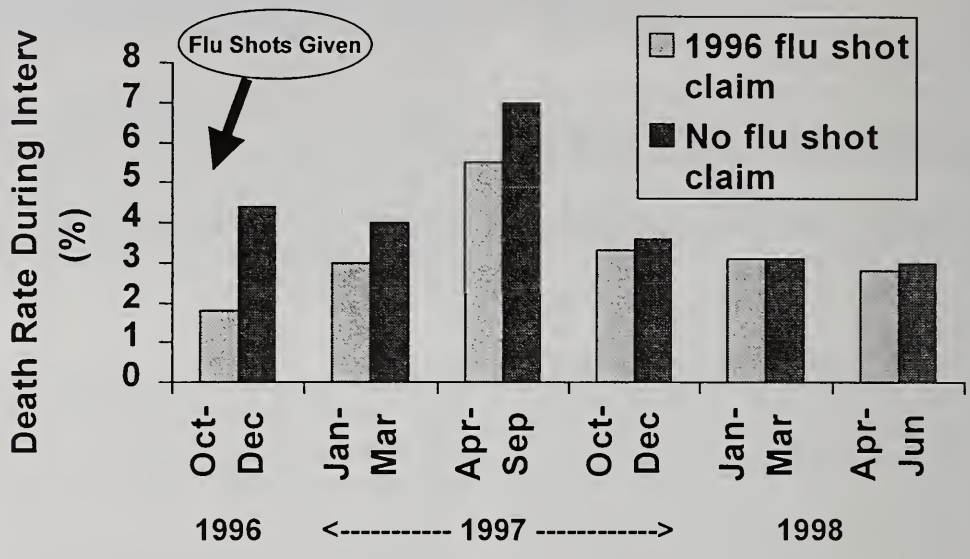


***Figure 1.*** **Death Rates in West Virginia Beneficiaries with Diabetes Following Opportunity to Immunize Against Influenza By 1996 Influenza Vaccine Claim Status.**

## Discussion

During two consecutive years when influenza was epidemic, having a claim for influenza vaccine reduced risk of dying during the subsequent influenza season in a large group of elderly WV Medicare beneficiaries likely to have diabetes. The strong protective effect remained after adjustment for demographics and comorbid conditions. Differences in death rates appeared immediately after an opportunity for immunization, and had declined one year later.

Previous researchers have observed increased death rates of between 5% and 15% among people with diabetes during influenza epidemic years (3). Nichol and colleagues showed reduced odds of death among immunized, intermediate-risk people when compared with unimmunized individuals. Carrat and Valleron observed small but significant death rate increases attributable to influenza among elderly people whose registered cause of death was diabetes mellitus during influenza epidemic years, and estimated deaths that could have been averted with increasing use of influenza vaccine (15). However, they did not specifically estimate the reduction of deaths due to influenza in people with diabetes. Our study demonstrates reduced mortality rates for diabetics receiving influenza vaccine in a community setting.

Most of the cautions applying to claims-based studies apply to this one. The diagnosis of diabetes mellitus has not been completely validated in these patients, and standards for listing a secondary diagnosis of diabetes in hospitalized patients almost certainly vary around the state. However, the patients identified as likely diabetics had the expected demographic characteristics, frequently had more than one hospitalization in which diabetes was recorded as a diagnosis, and had substantially higher mortality rates than other beneficiaries. Additionally, most of these patients with diabetes matched a list of WV Medicare beneficiaries who made one or more ambulatory visits to a WV physician in 1996 with a diagnosis of diabetes. Although we cannot be certain they all had diabetes, they were medically at high risk, and their risk increased with the number of times they had a diagnosis of diabetes recorded during hospital stays.

Rates derived from Medicare claims data for influenza immunizations are invariably lower than self-reported rates. In WV, the Behavioral Risk Factor Surveillance System estimated that 58.2% of people aged 65 or older received influenza vaccine in 1996-97 (6). This is about 20% greater than the Medicare claims rate. Some of the difference was caused by vaccine providers who did not bill Medicare for vaccinating seniors. In WV, some local health departments and mass vaccinators are known not to bill. However, unless people who had hospitalizations with a secondary diagnosis of diabetes were more likely to use non-billing providers than other beneficiaries, underreporting of vaccine use could not affect the results of this study.

Underreporting of vaccination would cause misclassification bias. Unless people who had the vaccine without having claims filed were more likely to die than vaccinees with claims, the bias would only reduce the apparent strength of the protective effect of vaccination. The actual strength of the association between vaccination and survival among elderly people with diabetes may be much stronger than we observed.

*Table 2.* **Results of Multiple Logistic Regression Predicting Probability of Death During 1996-97 Influenza Season for West Virginia Medicare Beneficiaries with Diabetes.**

| Variable | Description | Parameter Est. | Standard Error | Wald Chi-Sq. | P | Odds Ratio |
|---|---|---|---|---|---|---|
| INTERCPT | | -6.2357 | 0.3086 | 408.4 | 0.0001 | |
| FLU96 | 1996 claim for influenza immun. | -0.4485 | 0.0624 | 51.6 | 0.0001 | 0.639 |
| AGE | Age as of 9/1/96 | 0.0531 | 0.0039 | 189.6 | 0.0001 | 1.055 |
| SEX | 1=Male | | | | | |
| | 2=Female | 0.3698 | 0.0570 | 42.1 | 0.0001 | 0.691 |
| EPERYR2 | Log of number of inpatient diabetes diagnoses per year while alive | 1.5834 | 0.0319 | 2462.2 | 0.0001 | 4.871 |
| IHD2 | Total number of inpatient ischemic disease diagnoses (0,1 or 2) | -0.3702 | 0.0317 | 136.1 | 0.0001 | 0.691 |
| COPD2 | Total number of inpatient COPD diagnoses (0,1 or 2) | -0.0940 | 0.0329 | 8.2 | 0.0043 | 0.910 |
| CRF2 | Total number of inpatient chronic renal failure diagnoses (0,1 or 2) | -0.3354 | 0.0562 | 35.6 | 0.0001 | 0.715 |

*Table 3.* **Results of Multiple Logistic Regression Predicting Probability of Death During 1997-98 Influenza Season for West Virginia Medicare Beneficiaries with Diabetes.**

| Variable | Description | Parameter Est. | Standard Error | Wald Chi-Sq. | P | Odds Ratio |
|---|---|---|---|---|---|---|
| INTERCPT | | -8.2128 | 0.3523 | 543.5 | 0.0001 | |
| FLU96 | 1997 claim for influenza immun. | -0.5083 | 0.0675 | 56.7 | 0.0001 | 0.601 |
| AGE | Age as of 9/1/96 | 0.0865 | 0.0045 | 376.1 | 0.0001 | 1.090 |
| SEX | 1 = Male | -0.4516 | 0.0630 | 51.4 | 0.0001 | 0.637 |
| | 2 = Female | | | | | |
| EPERYR2 | Log of number of inpatient diabetes diagnoses per year while alive | 2.0701 | 0.0420 | 2425.1 | 0.0001 | 7.925 |
| IHD2 | Total number of inpatient ischemic heart disease diagnoses (0,1 or 2) | -0.4206 | 0.0349 | 145.5 | 0.0001 | 0.657 |
| CRF2 | Total number of chronic renal failure diagnoses (0,1 or 2) | -0.1504 | 0.0652 | 5.3 | 0.0210 | 0.860 |

Assuming that the patients in this study were likely to have diabetes, it is extremely disappointing to observe that they have no higher claims rates for influenza immunization than all elderly beneficiaries in West Virginia. All of these patients were hospitalized before or during the study period. Virtually all of them will have had outpatient care. To prevent premature mortality among Medicare beneficiaries with diabetes in West Virginia, physicians and other health care providers need to investigate and eliminate missed opportunities to immunize this vulnerable population against influenza.

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# Diet and nutrition in urologic cancer

**ASHISH M. KAMAT, M.D.**
*Resident, Dept. of Urology, West Virginia University School of Medicine, Morgantown*

**DONALD L. LAMM, M.D.**
*Professor and Chairman, Dept. of Urology, West Virginia University School of Medicine, Morgantown*

## Abstract

***Cancer is a major cause of mortality and morbidity throughout the world and is projected to become the leading cause of death in the United States and other developed countries in the next few years. There is a large body of evidence linking diet and nutrition with the development of urologic cancers. This is an area where intervention and education can have a major preventive effect on the occurence of cancer on a worldwide basis. With bladder cancer, a significant protective effect is conferred by a combination of high doses of vitamins A, $B_6$, C and E plus zinc. For prostate cancer, reduced fat intake has a protective effect. A lesser benefit is also suggested with intake of vitamins D and C. Evidence for chemoprevention against renal cell cancer is supported mainly by epidemiologic studies with animal studies indicating possible benefit of vitamin D supplementation. Further research is needed before vitamins and other nutritional supplements can be advocated as standard therapy. Current data support increased intake of vitamins A, $B_6$, C, D and E, reduction of animal fat and increased intake of fruits and vegetables.***

## Introduction

Cancer is a major cause of mortality and morbidity throughout the world and is projected to become the leading cause of death in the United States and other developed countries in the next few years (1). The multistage process of initiation and promotion that results in cancer generally provides a latency period of about 15 years, providing ample time for institution of preventive measures.

Cancers can be prevented by reducing exposures to initiators or by suppressing promotional activity in initiated cells. Agents may be given as part of a modification in dietary habits (as in the case of vitamins or minerals) or as agents synthesized and known to act in a preventive manner. Dietary constituents often have the advantage of a wide base of experience, including large epidemiologic studies that help define their safety and efficacy in humans. Also, with many developing countries adopting the lifestyle and dietary habits of western countries, this is one area where intervention and education can have a major preventive effect on the occurrence of cancer on a worldwide basis.

Neoplastic lesions of the urinary bladder and prostate are uniquely suited to the development and evaluation of chemopreventive agents.

## Bladder cancer

Up to 80% of bladder cancers initially present as superficial papillary transitional cell carcinomas with relatively benign behavior. Recurrence rates are 66% at five years and 88% at 15 years despite complete transurethral resection. Progression from superficial bladder cancer to deep muscle invasion occurs in about 15% of patients (2).

As a consequence of the high risk of recurrence and the easy accessibility of bladder tumors to observation, biopsy, and resection, neoplastic lesions of the urinary bladder are well suited to the development and evaluation of chemopreventive agents. Furthermore, just as carcinogens can be concentrated in the urine and have prolonged exposure to the mucosal lining, so can some chemopreventive agents be concentrated, delivered to the surface of desired action and held within the bladder for many hours at a time.

Moreover, chemopreventive agents that have a systemic or local effect by means of concentration in the urine have the advantage of potentially reducing the risk of tumors outside the bladder or in the upper urinary tracts, sites often missed with topical intravesical instillation.

## Prostate cancer

The lifetime chance of an American male developing prostate cancer is estimated at 19%, making prostate cancer one of the most important health problems facing men in the Western world today (3).

The epidemiology of prostate cancer suggest that environmental or nutritional factors are important in its pathogenesis and progression. Nutritional or environmental factors play a role in stimulating the growth of "latent" microfocal cancer in men who move from an area of low clinical incidence to the United States.

With increasing popularity of high-fat Western diets, rates of prostate cancer are expected to increase.

## Renal cancer

Renal parenchymal cancer is increasing in incidence and may become one of the major cancers of affluent societies (5).

Chemoprevention might be particularly useful in patients with an inherited risk for this cancer such as those with von Hippel-Lindau disease or familial renal cell carcinoma. In addition, individuals who have undergone radical nephrectomy for renal cell carcinoma who are at a high risk for recurrence because of locally advanced disease or the presence of lymph node spread might also be considered good candidates for preventive approaches (6).

## Dietary constituents

### Fat

Epidemiologic comparisons of international populations have shown a strong correlation between the amount of dietary fat consumed, obesity and the risk of developing prostate, bladder and renal cancer (7,8).

Giovannucci et al demonstrated that advanced stage prostate cancer was associated with a high dietary intake of fat, especially *a*-linolenic acid from red meat (9). Fatty acids found in fish oil and seafood have shown a protective effect against prostate cancer. Autopsy studies indicate a low incidence of atherosclerosis in Eskimos who eat a diet high in 3-omega fatty acids. In addition, unsaturated fatty acids have an effect on 5-alpha-reductase activity thus influencing the conversion of testosterone to dihydrotestosterone. Essential fatty acids influence cellular proliferation, tissue invasiveness, metastatic spread of tumors, immune responses as well as cell surface receptors.

Wang et al reported a marked decrease in tumor growth rate when mice injected with LNCaP human prostate cancer cells had their diet changed from a 40.5% fat diet to either a 11.6% or 2.3% diet. Based on these findings, a low-fat intervention trial has been proposed for cancer patients in whom serum PSA levels become elevated during follow-up after prostatectomy. These patients will be randomized between a 30% fat diet and a 15% fat diet with supplements.

Of added interest is the evidence suggesting that patients with elevated cholesterol may be at a higher risk for prostate cancer (10). This opens up an interesting avenue for research since the cholesterol lowering agents are in wide usage at the present time and their impact in reducing prostate cancer risk could be easily evaluated.

Numerous studies have shown an association between foods such as milk and meat and renal cancer. Frequent intake of fried/sautéed meat is believed to increase the risk of renal cell cancer by about 60%. The risk of RCC increases when total energy intake increases with an average relative risk of 1.6 (95% CI 1.2-2.2). This could explain why renal cell cancer is suspected to be associated with the affluence of a society (11).

### Vitamin A

Vitamin A is a fat-soluble vitamin that occurs in several forms including retinol and dehydroretinol and can be derived from carotenoids including beta-carotene. It is important for cell differentiation and promotes differentiation of normal and neoplastic cells in tissue culture as exemplified by the ability of all-trans-retinoic acid to cause acute promyelocytic leukemia blasts to differentiate into polymorphonuclear leukocytes (12).

Data suggest that the consumption of vitamin A and its analogues can help protect individuals from developing bladder and kidney cancer (13). However, data regarding prostate cancer and vitamin A intake is conflicting. Even though there are studies that demonstrate a statistically significant trend of increased prostatic cancer risk associated with decreasing serum retinol levels (14), other studies show a greater risk of prostate cancer with increased vitamin A intake (15).

One possible explanation for this discrepancy may lie in the source of dietary vitamin A. In Asia and other areas with a low incidence of prostate cancer, vitamin A is largely obtained from vegetables, but the main source of vitamin A in the U.S. is fat. The positive correlation between vitamin A and prostate cancer may be due to higher fat intake. These conflicting epidemiological studies emphasize the importance of animal studies and randomized prospective human trials.

Retinoids are potent suppressors of malignant cell transformation and can suppress in vitro carcinogenesis caused by viral transforming factors, chemical carcinogens or radiation (16). They are most effective when administered shortly after the carcinogenic insult, but even delayed retinoid treatment is effective in preventing cancer in the bladder (17). One study indicated that 13-cis-retinoic acid reduced the incidence, average number, and severity of transitional cell carcinomas as well as hyperplasia and cellular atypia in the urinary bladder of mice receiving BBN (18). Even a nine-week delay in starting the retinoid feeding did not diminish the ability of 13-cis-retinoic acid to inhibit bladder carcinogenesis. Studies utilizing retinoids together with Bacillus Calmette-Guérin indicate that these agents used simultaneously can be more effective that either one alone, and that the activity of retinoids may be potentiated by nonspecific immuno-stimulation (19).

The potential of vitamin A in the treatment and prevention of recurrent superficial bladder cancer was recognized by Evard and Bolag in 1972. Of 15 cases studied with oral administration of 100mg of vitamin A, four patients showed a complete remission and seven showed partial remission (20). Although the initial studies were encouraging, 13-cis retinoic acid leads to frequent side effects including cheilosis, conjunctivitis, pruritus, arthralgia, eye pain and flashing lights (21).

Modification of the basic retinoid structure has produced retinoids with increased target organ specificity, resulting in increased anticancer activity with reduced systemic toxicity. Etretinate, a synthetic retinoid with a more favorable therapeutic index than all-trans-retinoic acid or 13-cis-retinoic acid, has been shown to have a significant effect on the recurrence rate of superficial papillary bladder tumors (22). In a prospective randomized double-blind multicenter trial, Studer et al studied 79 eligible patients with superficial bladder tumors. These patients received either 25 mg of etretinate or a placebo orally each day. The mean interval to subsequent tumor recurrence was significantly longer in the etretinate group (20.3 months) as compared to the placebo arm (12.7 months) ($p = 0.006$). Consequently, the number of transurethral resections per patient-year was also reduced significantly in the etretinate group ($p < 0.001$).

Although beneficial in bladder cancer, there is controversy about the role of vitamin A in prostate cancer. In a placebo-controlled, randomized intervention trial called the Alpha-Tocopherol Beta-Carotene Cancer Prevention Study, beta-carotene was seen to cause an increase in the incidence of prostate cancer. This study consisted of 29,133 eligible male cigarette smokers ages 50-69 who randomly were given beta-carotene (20 mg), alpha-tocopherol (50 mg), beta-carotene and alpha-tocopherol, or placebo daily for 5-8 years. Beta-carotene treatment did not decrease cancer at any of the major sites but rather increase it at several sites, most

notably lung, prostate, and stomach. Prostate cancer increased by 25% (138 cases compared with 112). These results, however, must be tempered by the observation that the increase in cancer incidence was most pronounced in men consuming alcohol (23).

As with immunotherapy, the dose-response of nutritional chemopreventive agents may be bell-shaped. Excess administration may reduce efficacy or even promote tumors, and agents such as alcohol may shift the dose-response curve. The biphasic effect of retinoic acid on LNCaP growth should be considered in designing studies to determine the impact of retinoic acid on solid prostatic tumor growth (24).

Reduced beta-carotene levels are associated with increased risk for renal cancer in children (25). A protective effect of vegetables and fruits on renal cancer has been noticed. It has been theorized that retinoic acids may inhibit tumor cell invasion by suppressing type 4 collagenase. In an in vitro assay, non-toxic concentrations of all-trans-retinoic acid was seen to inhibit the invasion of highly metastatic human renal cell carcinoma cell lines and to induce marked clustering of these cells (26). This evidence would support the use of supplemental vitamin A, especially in conjunction with chemotherapeutic agents that are known to decrease serum levels of retinoic acid.

### Vitamin $B_6$ (Pyridoxine)

Pyridoxine, pyridoxal and pyridoxamine are related naturally-occurring pyridine compounds that have vitamin $B_6$ activity. Vitamin $B_6$ metabolites act as coenzymes and are involved in the metabolism of various compounds such as nonessential aminoacids, tryptophan and neurotransmitters.

Brown et al reported that certain tryptophan metabolites were elevated in the urine of patients with bladder cancer, and that they also produce cancer when implanted into the bladder of mice (27). Pyridoxine has been observed to correct this metabolic variation of tryptophan metabolism, which is noted in as many as 50% of patients with bladder cancer.

In a randomized multicenter Veterans Administration trial, Byar et al studied 118 patients with bladder cancer randomized to placebo, pyridoxine 25 mg orally, or intravesical thiotepa. If patients having recurrences during the first 10 months or followed up less than 10 months were excluded, pyridoxine was found to be much better than placebo ($p = 0.03$) and was as effective as thiotepa (28). The EORTC GU Group double-blind randomized phase III trial however showed no significant difference between the pyridoxine and placebo treatment groups with respect to the time to first recurrence or the recurrence rate (29). The fact that only one of the two studies demonstrated a benefit is not surprising.

Chemoprevention studies using non-toxic, inexpensive dietary supplements are expected to have mild effects and large studies would be required to confirm statistical significance. These studies dealt with patients in two different countries and that the genetic difference between the patients in North America and those in England might be a factor. Also, discrepancies between the two studies could possibly be attributed to the different dietary or smoking habits of the two groups of patients.

### Vitamin C

Ascorbic acid is a potent reducing agent. Vitamin C is the major circulating water-soluble antioxidant and acts as a free radical scavenger. Citrus fruits and black currents are the richest sources. Other sources include include tomatoes, potatoes, green chilies, and cabbage.

Diets high in fruit and vegetables, and hence high in vitamin C, have been found to be associated with lower risk for cancers of the oral cavity, esophagus, stomach, colon, and lung. Shibata et al performed a cohort study of 11,580 residents of a retirement community who were initially free from cancer and were followed for eight years. After adjustment for age and smoking, an inverse association was observed between vitamin C supplement use and bladder cancer risk (30).

In murine bladder cancer models, oral vitamin C inhibits tumor formation caused by nitroso compounds (31) or by implantation of 3-hydroxanthranilic acid. Although some studies have also shown that sodium L-ascorbate and L- ascorbic acid promote urinary bladder carcinogenesis in a dose-related manner (32), this finding has not held up in other studies (33).

The possibility exists that there is a threshold dose beyond which vitamin C has a carcinogen-promoting effect. It has been postulated that tumor cells with different lineage may have different sensitivities to ascorbic acid and that cancer cells may exist in two forms, one sensitive to inhibition by ascorbic acid and the other resistant to its anticarcinogenic effect. The cytotoxic effects of ascorbic acid on the sensitive cell lines are time and dosage dependent (34).

In a recent study, in vitro treatment of both androgen-independent and androgen-dependent human prostate cancer cell lines with vitamin C resulted in a dose- and time-dependent decrease in cell viability and thymidine incorporation into DNA. These results suggest that ascorbic acid could be a potent anticancer agent for prostate cancer cells (35). Interestingly, the antitumor activity of vitamin C seems to be enhanced by the addition of vitamin K. Co-administration of the vitamins enhances the antitumor activity of vitamin C 5- to 20-fold demonstrating a synergistic effect (36).

Finally, vitamin C supplementation has been shown to inhibit kidney carcinogenesis (32). Studies have demonstrated that vitamin C decreases estrogen-induced tumor incidence by approximately 50% but does not influence hormone-dependent growth of kidney tumors (37). Furthermore, in a population-based case-control study, a protective effect of vitamin C was found with the effect being more pronounced in non-smokers.

### Vitamin D

Vitamin D is a collective term given to antirachitic substances synthesized in the body in response to UV radiation and found in foods activated by UV radiation. Calcitriol ($1,25\text{-}D_3$) is the active form of vitamin D.

Epidemiologic studies show an inverse association between ultraviolet solar exposure and mortality rates from prostate cancer (38). Corder et al showed an association between vitamin D levels and development of prostate cancer using more than

250,000 serum samples that were collected between 1964 and 1971. In men above the median age of 57 years, a lower 1,25-$D_3$ level was associated with increased prostate cancer in both white and black men. In addition, 1,25-$D_3$ was an important predictor of risk for palpable and anaplastic tumors.

Besides inhibiting proliferation and promoting the differentiation of human prostate cancer cells, treatment with vitamin D has been shown to cause a selective decrease in the secreted levels of type IV collagenases in these cell lines. These findings support the hypothesis that 1,25-$D^3$ reduces the risk of invasive prostate cancer and suggest a role for vitamin D compounds in the chemoprevention of invasive prostate cancer (40). New, relatively non-toxic vitamin $D_3$ analogs have been developed and several of these compounds have marked antiproliferative effects on prostate cells. A recent study from the National Cancer Institute has even shown an association between prostate cancer risk and a genetic variation of the vitamin D receptor in prostate cells.

Various aspects of renal cell carcinogenesis are affected by the patient's immunologic status. Vitamin D has a dual effect on the immune function with immunosuppressive effects seen in both deficiency states as well as hypervitaminosis D (43). In a study of 30 patients with renal cell carcinoma, the concentration of 1 alpha, 25-$(OH)_2D$ was significantly lower in the patients with renal cell carcinoma compared to in the controls ($p < 0.01$). Furthermore, the average serum 1 alpha, 25-$(OH)_2D$ concentration was significantly lower in the higher stage tumors.

These findings suggest the serum concentration of 1 alpha, 25-$(OH)_2D$ is in some way correlated with the progression of renal cell carcinoma. Fujoika et al (45) have further shown that vitamin D has an anti-tumor effect on renal cell carcinoma in mice. In their study, vitamin D compounds significantly inhibited tumor growth in mice in a dose-dependent manner ($p < 0.01$); inhibited angiogenesis by 30%-46%; decreased incidence of tumor metastasis and increased survival (60%-90% of the treated mice were alive at day 32 vs. 100% of the mice in the control group by day 28.

Interestingly, this anti-tumor effect was not demonstrated in cell culture assays thus negating a direct anti-tumor effect. Furthermore, when the treatment was delayed to day 7 after tumor inoculation, no effect was seen. These observations indicate that vitamin D may be effective as a chemopreventive agent and not as a treatment, as well as the fact and vitamin D supplementation after radical nephrectomy in high-risk groups could potentially prevent tumor recurrence and/or metastases.

### Vitamin E

A number of tocopherols, of which alpha-tocopherol is the most abundant and potent, have vitamin E activity. Sources include wheat germ, cereals, nuts, spinach and egg yolk.

Vitamin E acts as an antioxidant, protecting cell membranes and metabolic enzymes from free radical oxidation damage. Studies of thymidine incorporation have shown that vitamin E supplementation reduces DNA synthesis and causes extensive DNA fragmentation leading to apoptosis. Siguonas et al have shown that alpha-tocopherol generally inhibits cell proliferation in tissue culture with breast and prostate cancer cells being distinctly more sensitive than erythroleukemia cells (46).

Although the previously mentioned ATBC study was designed to study the effect of vitamin E and beta-carotene on lung cancer, it also revealed that the men receiving vitamin E had a 34% lower incidence of prostate cancer over a six-year period (from 151 cases in the placebo group to only 99 in men receiving vitamin E)(47). In another study involving 2,974 men over 17 years of follow-up, low plasma levels of vitamin E was seen to be related to an increased risk for prostate cancer (48).

Low intake of vitamin E has been linked to an increased risk of renal cell carcinoma (49). Studies of the dietary habits of different populations have suggested a protective effect of alpha-tocopherol, especially among nonsmokers (50). In fact, published literature includes claims of spontaneous healing of metastases of kidney cancer with vitamin E therapy. One such report by Crespy involved resolution of subcutaneous and abdominal metastasis from renal cell carcinoma after therapy with Ephynal (vitamin E)(51).

Such reports remain anecdotal and need to be substantiated, but animal studies support the protective role of vitamin E in renal carcinoma. Using an experimental model of iron-induced oxidative nephrotoxicity and renal cancer, Zhang et al showed that vitamin E inhibited tissue lipid peroxidation, apoptosis and the development of cancer.

### Combination Vitamins

Although general oncology policies dictate that combination therapy be given only after each therapeutic drug has demonstrated activity in its own right, a combination of nutritional supplements should have minimal side effects and would identify synergistic effect of agents that might individually have lesser effect.

Using this premise, Lamm et al studied the effect of megadose vitamin combination in a double-blind randomized trial (53). Sixty-five patients with biopsy confirmed transitional cell carcinoma (TCC) of the bladder received either the recommended daily allowance of multiple vitamins or the RDA plus 40,000 IU vitamin A, 100mg Vitamin $B_6$, 2,000mg vitamin C and 400IU vitamin E (Oncovite, Mission Pharmaceuticals). No major differences in risk factors existed between groups.

Curves for time to recurrence of the two vitamin groups, as might be expected in a chemoprevention trial, were identical for the first 10 months, but diverged significantly thereafter. Five-year estimates of tumor recurrence were 91% in the RDA arm and 41% in the megavitamin arm ($p = 0.0014$). Overall, recurrence was 80% (25/30) in the RDA arm and 40% (14/35) in the megavitamin arm ($p = 0.0011$). Stratifying the patients according to tumor stage showed a statistically significant ($p = 0.003$) benefit of a 42% reduction in tumor recurrence in those with superficial (Ta, T1) TCC. Stratifying the patients according to tumor grade also showed a statistically significant ($p = 0.007$) benefit of 53% in those with low grade (G1, G2) TCC. Furthermore, high doses of vitamins resulted in a statistically significant, long-term increase in natural-killer cell

lysis compared to baseline. The high dose vitamins were generally well tolerated, with mild nausea being the most common side effect.

### Garlic

Garlic has been studied as a form of immunotherapy for various malignancies. Lau et al found that aged garlic extract was more effective than BCG immunotherapy in the MBT2 murine bladder tumor model via both intralesional and intravesical routes of administration (54).

In a more recent study, Riggs and Lamm from West Virginia University confirmed that intralesional garlic extract has a highly significant and reproducible antitumor activity in transitional cell carcinoma of the bladder. In contrast to previous reports, repeated intralesional garlic extract injections were very toxic (55), but most remarkably, oral garlic administration was found to be nontoxic and highly effective.

### Selenium

Epidemiologic studies have indicated that selenium may have a protective effect on various cancers including prostate and bladder cancer. The risk of cancer for patients with low serum selenium has been estimated to be up to twice that of subjects with higher levels. The association is strongest for gastrointestinal and prostatic cancer (56).

Clark et al recently reported the results of a randomized trial of 1,312 patients testing the effect of selenium supplements in dermatological malignancies. Serendipitously, a major reduction in the rate of prostate cancer was discovered in the men given selenium (13 vs. 35 cases)(57). Further study is needed to confirm selenium's role as a chemopreventive agent.

### Soy Proteins

Soy proteins have received widespread attention in the press as being protective against cancer. Messing et al from the National Cancer Institute (58), suggest that consumption of soyfoods may contribute to the relatively low rates of breast, colon, and prostate cancers in countries such as China and Japan.

The beneficial effects of soy are thought to be due to isoflavones, namely genistein and daidzein. Genstein has an effect on prostate cancer cells and decreases tumor growth in mice implanted with human prostate cancer cells. In addition, genistein inhibits the growth of proliferating endothelial cells thereby inhibiting the development of a tumor's nutrient blood supply (59).

Soy protein may also inhibit bladder tumor carcinogenesis. In Swiss albino mice, soy protein has been reported to reduce dysplasia and bladder tumors induced by nitrosamines.

### Green Tea

Studies suggest that consumption of green tea polyphenols (GTP) can decrease the risk of prostate cancer. As early as 1988, Khan et al reported that topical application of GTP protected against skin tumor induction in mice (60). Further studies supported this report and showed a protective effect of oral intake of green tea (61).

Epigallocatechin-3-gallate treatment has shown to induce cell cycle arrest and apoptosis in human prostate cancer cell lines (62). These findings may partially explain why there is a lower incidence of clinical prostate cancer in Asian countries where green tea is consumed in large amounts. Since green tea is cheap, non-toxic and readily available, it would be an ideal chemopreventive agent if proven to protect men from prostate cancer.

## Conclusion

Although most of the data presented in our review has been in the public domain for several years, physicians who take care of cancer patients often ignore the impact of diet and nutrition on disease. There is a mistaken prejudice that if an agent is naturally available and not chemically synthesized in a lab, it must be relegated to the realm of cancer quackery.

As a result of this misconception, legitimate scientific investigation has been impeded. We should remind ourselves of what we know to be true: objective, controlled, scientific studies can answer our treatment questions. Science rather than bias should guide our treatment decisions.

Epidemiologic reports provide the strongest evidence for a protective role for dietary agents against cancer of the bladder, prostate and kidney. Recent rials have emerged which support these findings in the case of adenocarcinoma of the prostate and transitional cell carcinoma of the bladder. There is strong evidence for a protective effect of vitamins A in bladder cancer. For bladder cancer patients, we recommend 32,000 IU a day of vitamin A initially, with lower doses (24,000 IU) for those less than 50 kg. While we have not seen liver toxicity with long-term administration, lower doses (16,000 IU) are recommended after three years. Vitamin $B_6$ has been studied in several clinical trials in bladder cancer. Only the VA cooperative study found benefit of vitamin $B_6$ when given as a single agent.

Similarly the data for vitamins C and E are insufficient to recommend either agent as stand-alone treatment. Nonetheless, each of these vitamins is known to have beneficial effects, including improved function of the immune system. It is possible that only a small percent of bladder cancer patients respond to vitamins $B_6$, C, or E, yet each is safe and inexpensive. Increased efficacy in a combination of vitamins may be determined in a clinical trial that would have insufficient power to detect the benefit of a single agent.

For this reason, we evaluated the combination of vitamins A, $B_6$, C, and E in a double-blind trial. The observed 50% five-year reduction in tumor recurrence was highly significant and of greater magnitude than would be expected for any of the individual ingredients, and suggest that combinations of nutritional agents may be most appropriate.

Although the conflicting data on vitamin A and prostate cancer may be explained by the source of dietary vitamin A, the fact remains that vitamin A has been correlated with an increased risk for prostate cancer. In vitro and animal data suggest a possible benefit for vitamin A derivatives, but clearly high doses of beta-carotene should be avoided based on the large study that showed a 25% increase in the number of cases of prostate cancer and a significant increase in cases of lung cancer.

In prostate cancer, increasing data suggest a role for vitamins D and E. There is a strong relation of vitamin D deficiency and the development of prostate cancer. The benefit of vitamin D is supported by in vitro data, but trials have not yet been reported for it. The clinical trial of vitamin E showed a 34% reduction in prostate cancer in 29,974 men. A safe and inexpensive recommendation for patients with prostatic intraepithelial neoplasia or a strong family history of prostate cancer is to follow a low-fat diet, increase their intake of soy products, and take vitamins D (1600 IU D3 or 400% of the RDA) and E (400-800 IU).

Recent studies have suggested that vitamin D may have antiproliferative activity in renal cell cancer as well. Among the other compounds and dietary substances purported to have chemopreventive effect, soy beans, garlic and green tea stand out as having the greatest promise and can freely be recommended to patients.

Thus, though there is no indisputable proof, several studies implicate dietary and nutritional factors in the onset and progression of cancers of the bladder, prostate and kidney. Many of the dietary factors found to be protective against urologic cancer have other health benefits and can be advocated for good health in general. The public is receptive to small discreet changes in their lifestyle and food habits, so it is in this area that chemoprevention will show its efficacy.

Unfortunately, dietary changes such as decreasing fat and increasing fruit and vegetable intake are difficult to initiate. Most people would rather take a pill, hence the need for vitamin supplementation. Further research is needed before vitamins and other nutritional supplements can be advocated as standard therapy, but the preponderance of evidence supports increased intake of vitamins A, $B_6$, C, D and E, reduction of animal fat and increase intake of fruits and vegetables. If these simple measures can protect against urologic cancers, there could be a significant impact on health care and health care expenditures.

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***(Please contact the first author for other references listed in this article.)***


# Prasadarao B. Mukkamala, MD

Union Square • 1 Monongalia Street • Charleston, WV 25302

Dr. Mukkamala is a Diplomate of the American Board of Physical Medicine and Rehabilitation and the American Board of Electro-Diagnostic Medicine.

**Specialist in Electromyography and Nerve Conduction Studies**

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# Concerns and self-reported competencies in end-of-life care: A survey of physicians in WV

**SUE C. WARREN, M.D., F.A.C.P.**
*Medical Director of Kanawha Hospice Care, Dunbar*

**STEPHEN C. HINES, PH.D.**
*Assistant Professor of Communication and Director of Research for the Center for Health Ethics and Law, Robert C. Byrd Health Sciences Center, West Virginia University, Morgantown*

**ALVIN H. MOSS, M.D.**
*Director of the Center for Health Ethics and Law, Robert C. Byrd Health Sciences Center, West Virginia University, Morgantown*

## Abstract

***To assess concerns and self-reported competencies in end-of-life (EOL) care, we surveyed a random sample of West Virginia physicians and received 255 responses (33%). Those responding identified three major barriers to good EOL care: patient and family demands for all possible treatments, lack of physician education and inadequate financing. Most identified themselves as less than informed about EOL legislative and regulatory issues and were less than satisfied with their EOL symptom management skills. Most reported that their patients would want hospice care at the end of their lives, but indicated that a major reason for not referring a patient to hospice was patient and family denial of approaching death. Most respondents rated the overall quality of EOL care in West Virginia as fair to poor. We conclude that physician respondents recognize the need to improve their knowledge and skills in EOL care to improve the care of the dying in West Virginia.***

## Abstract

Public dissatisfaction and fear about the quality of care of the dying is well recognized, and it has fueled the current debate about physician-assisted suicide. The medical literature documenting inadequate end-of-life (EOL) care continues to grow (1,2), and so does the proportion of elderly in the population.

Good EOL care is particularly relevant to West Virginians because this state has the highest median age in the nation, and ranks first and third respectively in deaths from heart disease and cancer (3). These concerns have stimulated a statewide multidisciplinary and comprehensive effort to understand the barriers to good EOL care and to develop improved models of palliative care.

In 1998, the West Virginia Initiative to Improve End of Life Care (WV Initiative) was formed. An initial priority was to gather opinions from health care providers and the public about perceived barriers and needs in EOL care. Surveys of health care professionals and statewide community dialogues were conducted. The surveys sent to doctors, nurses, social workers and pharmacists were tailored to each discipline by a task force of the WV Initiative.

This report summarizes the responses to the survey of practicing physicians about their concerns and self-assessed competencies related to EOL care.

## Methods

A 42-item questionnaire was mailed to 775 West Virginia physicians who were selected by random sample from a list of internists, family practitioners, pulmonologists and oncologists provided by the state Board of Medicine. Retired physicians and those with inaccurate addresses were excluded. Non-respondents were sent a second mailing three weeks later.

This questionnaire, which can be obtained from the Center for Health Ethics and Law at West Virginia University, asked physicians for information regarding these subjects:

- The quality of EOL care in WV;
- The major barriers to EOL care in West Virginia;
- How well informed they were about WV statutes impacting on EOL care (advance directive statutes, Health Care Surrogate Act and Management of Intractable Pain Act);
- Their satisfaction with a number of EOL care skills (Table 1);
- The extent of their cumulative training in medical school, residency and CME in EOL care;
- Their attitudes and those of their patients toward hospice;
- The number of patients in their practice who died in the last year and number referred to hospice.

## Results

Of 775 mailed surveys, 255 (33%) were completed and returned. Seventy-five percent of respondents were men and 25% were women. Their average age was 47 years. Eighty-seven percent were primary care specialists, 6% were oncologists, 4% were pulmonologists and 3% did not specify their specialty.

Respondents had been in practice an average of 16 years. Physicians estimated that they were treating an average of 22 patients who were in their last year of life, and that they had referred an average of seven patients to hospice in the last year. Fifty-nine percent reported having received one week or less of formal training in palliative medicine.

Respondents rated the quality of EOL care in West Virginia as a mean of 2.5 on a scale where 5 equaled excellent and 1 was poor. The majority (54%) rated it as fair or poor. Physicians identified the following as major barriers to quality EOL care:

- Patient and family demands for all possible treatments (71%);
- Lack of physician education (67%);
- Poor financing and insurance coverage (67%);
- Health care legislation (34%);
- Concern over Board of Medicine scrutiny of prescribing practices for dying patients (31%);
- Lack of a palliative care delivery system (28%); and
- Lack of spiritual support for dying patients and their families (18%).

Physicians rated their satisfaction with their ability to perform important skills in EOL care according to a scale of 1 to 5 where 1 is "very dissatisfied" and 5 is "very satisfied" (Table 1). A score less than 4 indicated that the average physician was less than satisfied with his/her skills; physician mean scores were less than 4 in 11 of 13 areas of inquiry.

***Table 1.* Physician Mean Satisfaction Scores with End-of-Life Care. (N = 255)**

| | |
|---|---|
| **Discussing Do-Not-Resuscitate orders** | **4.0** |
| **Discussing hospice referrals** | **4.0** |
| **Breaking bad news** | **3.9** |
| **Discussing treatment withdrawal** | **3.9** |
| **Family conference skills** | **3.8** |
| **Handling requests for sedation** | **3.8** |
| **Pain management skills** | **3.7** |
| **Treatment of nausea** | **3.7** |
| **Treatment of dyspnea** | **3.5** |
| **Treatment of terminal restlessness** | **3.5** |
| **Management of secretions** | **3.2** |
| **Treatment of confusion** | **3.2** |
| **Management of death rattle** | **3.2** |

***Scale:***
***1 = very dissatisfied***
***2 = dissatisfied***
***3 = somewhat satisfied***
***4 = satisfied***
***5 = very satisfied***

Most physicians scored themselves as less than informed about the following legislation: the West Virginia Management of Intractable Pain Act (65% of respondents), state laws governing assessment of decision-making capacity for terminally ill patients (52% of respondents), and regulations governing Schedule II drug dispensing in emergencies and to long-term care facility and terminally ill patients (58% of respondents.) Twenty-six percent of those surveyed agreed that they underprescribed opioids because of the regulatory climate in the state, and another 21% gave a neutral response to this question. While 96% of respondents stated that they have never been investigated by a regulatory body or the Board of Medicine for prescribing Schedule II drugs for persons with intractable pain, nearly half (47%) agreed that current laws and regulations need to change to make it easier for doctors to mange the pain of dying persons.

Respondents estimated that 60% of dying persons in their area would want quality hospice care. Reasons for not referring patients to hospice were ranked on a five-point scale from "not at all important" to "extremely important." Respondents listed "patient and family denial" as the most important reason for not referring patients to hospice (83%). Other important factors were:

- Uncertainty concerning local hospice services (43%);
- Uncertainty over whom to refer (36%);
- Difficulty working with local hospice programs (31%);
- Poor quality of care by local hospice programs (28%);
- Loss of control over referred patients (24%);
- Not believing in giving up on patients (23%); and
- No available hospice serving the area (22%).

## Discussion

Our study shows that WV physicians are not satisfied with the quality of end-of-life care in this state. Most respondents identified three main barriers to good EOL care: public demand for aggressive care, lack of physician education, and inadequate funding for palliative care. In addition, most respondents did not feel well informed about WV laws addressing EOL issues, and nearly one third stated regulatory concerns were a barrier to treating pain in dying patients.

Even though only one-third of the physicians sampled responded to the survey, as well as the fact that most of them were in primary care, their demographics were similar to known demographics of WV physicians. It is likely that those who responded were more interested in palliative care. If so, the survey may overestimate the knowledge and competence of physicians in EOL care. However, these results confirm several national trends in EOL care, (1) and they provide a valuable first look at the concerns of WV physicians about EOL care.

The lack of physicians' personal satisfaction with important clinical skills in providing EOL care is striking, but not surprising. Most respondents indicated that they had less than a week of formal training in palliative medicine. This finding is in keeping with recent studies that have shown that the curriculum in medical schools inadequately addresses palliative medicine (4), and current textbooks neglect this area as well (5).

Respondents indicated that they are uninformed and/or skeptical about the merit of certain state laws and regulation issues that impact individuals who are dying, as well as

about local hospice services, but it is not possible to discern dissatisfaction precisely in some areas. For example, one cannot tell if local hospice programs were "difficult to work with" because of the limitations of the Medicare Hospice benefit which is a national concern (6), or for a reason related to a specific hospice.

Our study underscored the national trend of low hospice referral rates. Hospice care is a model of EOL care that provides high patient and family satisfaction (2), and most doctors surveyed thought that their patients would want such care assuming it was of good quality. Yet only 11.3% (7) of dying West Virginians receive hospice care, which is 35% less than the low national average of 18% (8). Even if a hospice referral is made, it is often very late, since the national median length of hospice stay is less than 25 days (9). The overwhelming reason respondents gave for this occurrence is patient and family denial of impending death, so it is obvious that physicians need to talk candidly with patients and families about death at the onset of a known progressive illness.

It is interesting to note that physicians are satisfied with their communication skills, and yet they feel that family and patient attitudes were a major barrier to good EOL care. Dying and death is something that neither patient nor health care provider want to talk about, and this attitude is underscored by the recent literature (10). Even though physicians feel satisfied with their communication skills about EOL care, they may still put off these discussions until they are initiated by patients or family members, or when there are clear signs of impending death. This delay may especially be the case if physicians lack confidence in their symptom management skills, or lack certainty or understanding about EOL regulatory or legislative issues.

In the past, doctors have been proactive in educating the public about "taboo"topics such as mental illness and sexually transmitted diseases. Such efforts were important in shaping public attitudes about these problems and in improving care. These improvements depended on the involvement of clinicians who were willing to discuss these issues in both professional and community settings.

A similar effort now is needed to foster better public understanding of EOL issues. Physicians will be more likely to engage in this dialogue if they feel confident and knowledgeable about their own EOL skills, and if they are personally convinced that there is much that can be done to assure the dignity and comfort of dying patients. Training in palliative medicine would not only boost physician competency, but it might lead more physicians to discuss concerns about current EOL care with the public. Ultimately, this discussion could be crucial in fostering a new understanding of EOL treatment choices in our death-denying society.

It is clear from this study that many WV physicians are concerned about the present state of EOL care, and they recognize their own need for more information and training. The WV Initiative is offering physician education and making plans to address the other barriers to good EOL care which this study identified. With broad physician support, these efforts could translate into significant improvement in the care of West Virginians who are near the end of life.

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# Chlamydia pneumoniae and cardiovascular disease: Current status

***JAMES P. BOLAND, M.D., M.P.H.***
*Robert C. Byrd Health Sciences Center, Charleston Division; Charleston Area Medical Center, Dept. of Surgery, Charleston*

## Abstract

***Chlamydia pneumoniae is a recently discovered respiratory pathogen that has been found in a large ( > 50) percentage of atherosclerotic plaques, aortic aneuryms and astenotic aortic valves. It is also found in Alzheimer plaques. C. pneumoniae should not be confused with chlamydia trachomatis, which is the cause of primarily a sexually transmitted disease. This article reviews the transmission and proliferation of C. pneumoniae and discusses its role in cardiovascular disease.***

## Introduction

Chlamydia pneumoniae, a recently discovered respiratory pathogen, has been found in > 50% of atherosclerotic plaques, aortic aneurysms, and stenotic aortic valves. C. pneumoniae is also found in Alzheimer plaques. It should not be confused with chlamydia trachomatis, which is the cause of primarily a sexually transmitted disease.

C. pneumoniae is an obligatory intracellular Gram negative bacterium. It must proliferate intracellularly because it lacks ATP generating capacity and must derive its energy from the host cell. Outside the cell, it is surrounded by a protective coat and, in that form, is known as an Elementary Body. C. pneumoniae enters the body via the respiratory mucosa and is passed on to other cells, notably macrophages, as it proliferates. Virtually everyone, worldwide, has had a C. pneumoniae infection at least once. There is no permanent immunity.

Normally, macrophages would ingest the organism, kill it in a phagolysosome, and then pass specific organism derived peptides to T cells to generate an immune response. This does happen but, in some cases, viable C. pneumoniae organisms persist inside the macrophage. C. pneumoniae infected macrophages are carried through the circulation and take up residence in atherosclerotic plaques, aneurysms, and stenotic aortic valves. There may be a genetic predisposition to having a persistent infection.

The stimulus to macrophage migration into the vessel wall must be present to attract the macrophage (LDL in the case of atherosclerotic plaques, fractured elastin fibers in aneurysms, and LDL plus hemodynamic stress on the aortic surface of sclerotic valves). The question, yet to be answered, is whether C. pneumoniae makes a bad situation worse or is simply an innocent bystander.

Animal studies seem to indicate that C. pneumoniae does accelerate the progress of the disease and that early intervention (by antibiotic therapy) can reverse the situation. However, designing studies to determine if C. pneumoniae therapy at an earlier stage will change the course of these diseases will be difficult because of the lack of standardized pre-clinical indicators and the infinite variations of long-term antibiotic regimens, but a study on the progression of small abdominal aortic aneuryms is underway (1).

Some small studies in advanced disease (status post myocardial infarct or unstable angina) seemed to indicate that subsequent cardiovascular events were diminished. Longer follow up and the larger ACADEMIC Study (2) have largely discredited the early reports. More results from the ACADEMIC Study and preliminary reports from two large trials (ACES & WIZARD) should appear in 2000. It appears unlikely that antibiotic therapy will have a major effect in the prevention of cardiovascular events when the disease is advanced (status post myocardial infarct, TIA or Stroke, (> 5 cm) abdominal aortic aneurysms or hemodynamically significant aortic valve stenosis).

An interesting chapter in the evolution of cardiovascular disease is unfolding. Clinicians who wish to follow the story closely should look for reports generated by Dr. J. Thomas Grayston (who discovered the organism in 1986) and his colleagues at the University of Washington, Seattle (3).

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# WVSMA's Annual Business Meeting

**Speaker of the House Dr. Douglas McKinney presides over the First Session of the WVSMA House of Delegates. Also pictured are WVSMA Executive Director Evan Jenkins; President-Elect Dr. Ahmed Faheem; Vice President Dr. John Holloway; President Dr. Phillip Stevens; Treasurer Dr. Elizabeth Spangler; and Senior Councilor-at-Large Dr. Thomas Chang.**

This year's WVSMA Annual Business Meeting was conducted in Charleston from April 14-16 to facilitate a greater opportunity for all members to be involved in the work and decisions of the WVSMA.

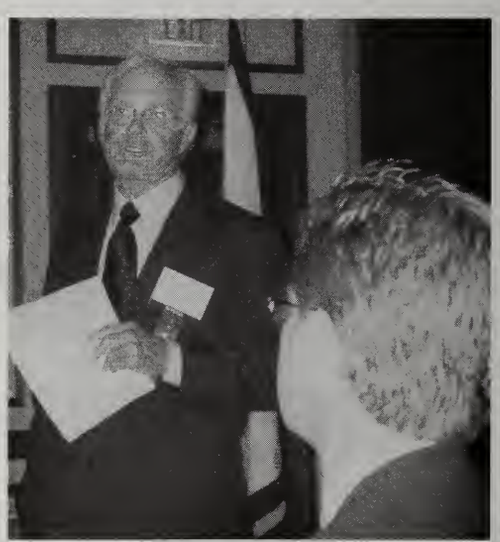
The meeting started on Friday evening, April 14, with an Executive Committee Meeting and then the Council held a business meeting and dinner. On Saturday, the First Session of the House of Delegates took place with events that included the presentation of awards; the awarding of the checks from the AMA Foundation; an update on Medical Assurance; and a report on the Blue Cross/Blue Shield liquidation. In addition, resolutions were introduced and referred to the Resolutions Committee, and nominations for new officers for the WVSMA were received. During the afternoon, meetings were held of the Resolutions Committee, Medical Education Committee and Scientific & Educational Sessions Committee, the WESPAC Board of Directors met to endorse candidates. and a session was conducted on the WVSMA's new Health Programs' Initiative.

Sunday's agenda featured the Second Session of the House of Delegates with delegates voting for the new WVSMA officers, a report on the WVSMA's Alliance by Betty Kuppusami, who will serve as president from Aug. 2000 to Aug. 2001; a report of the Resolutions Committee and a wrap-up on the 2000 Legislative Session. The new officers of the WVSMA who will be installed during the WVSMA's 2000 Program at The Greenbrier from Aug. 24-27 are:

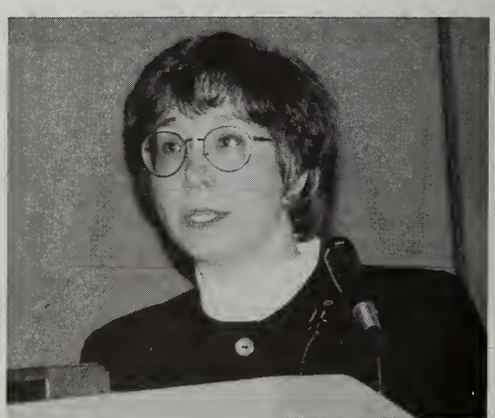
President - John D. Holloway, M.D.
President-Elect - Ahmed D. Faheem, M.D.
Vice President - Douglas E. McKinney, M.D.
Treasurer - Elizabeth L. Spangler, M.D.
Speaker of the House - Terry L. Elliott, M.D.
Vice Speaker of the House - Ron D. Stollings, M.D.

AMA Delegates
- Constantino Y. Amores, M.D.
- James D. Helsley, M.D.
- John D. Holloway, M.D.

AMA Alternate Delegates
- Thomas H. Chang, M.D.
- James L. Comerci, M.D.
- Joseph B. Selby, M.D.



**Dr. Derrill Crowe, chairman of Medical Assurance, discussed malpractice issues at the meeting.**



**Michele Grinberg, general counsel for the WVSMA, informs members about the success of WVSMA's efforts in the Blue Cross/Blue Shield suit.**

***(Top left)*** **Dr. Vincent Townsend was presented the Rural Physician of the Year Award at the Eastern Panhandle Medical Society's Meeting on April 12 by WVSMA President Dr. Phillip Stevens and WVSMA Executive Director Evan Jenkins in conjunction with the Annual Business Meeting.** ***(Top right)*** **Vice Speaker of the House Dr. Ron Stollings delivers his remarks before convening the Second Session of the House of Delegates.** ***(Center left)*** **Bob and Cheryl Ord of Winfield, who during the past 24 years have taken care of 185 foster children and adopted five of them, were the recipients of this year's Presidential Citation.** ***(Center right)*** **Nancy Tonkin, contract lobbyist for the WVSMA, provided members with a wrap-up on key legislative issues.** ***(Bottom)*** **Alliance President-Elect Betty Kuppusami discussed her health projects and plans for the coming year.**

# Resolutions

## Resolution No. 1 *(Disapproved)*

RESOLVED, that the West Virginia State Medical Association Insurance Committee, with the backing of the State Medical Association, seek to modify these rules so that the talent of older physicians and those changing employment and retiring physicians be utilized to the maximum possible.

## Resolution No. 2 *(Disapproved)*

RESOLVED, that an independent review agency be organized to handle physician appeals of insurance company length of stay denial.

## Resolution No. 3 *(Disapproved)*

RESOLVED, in addition to this resolution and public statement, the WVSMA will begin the process of creating a legal defense fund for the purpose of defending any physician in the State of West Virginia who may be threatened, harassed or harmed by these actions. We encourage all members to contribute to this fund because the time to act is now. The WVSMA will also seek the help of the national association in this matter.

## Resolution No. 4 *(Disapproved)*

RESOLVED, that the WVSMA investigate with other health-related organizations and establish an orientation program for physicians establishing new practices in West Virginia, to include their families and to keep the cost low, considering a site such as a state park or college campus.

## Resolution No. 5 *(Disapproved)*

RESOLVED, the WVSMA continue to pursue meetings of the WVSMA, including educational meetings, at sites around the state from year to year.

## Resolution No. 6 *(Adopted)*

RESOLVED, that the WVSMA calls upon the AMA to immediately notify each member of a state's delegation whose membership allocation in the AMA House of Delegates is in jeopardy of being reduced and that the AMA notify the field agent for the state whose delegation is or maybe affected; and be it further

RESOLVED, that the AMA send to the state's medical association office the *"AMA Membership and Delegate Allocation Report"* on a quarterly basis.

## Resolution No. 7 *(Adopted)*

RESOLVED, that WVSMA calls upon West Virginia physicians to not engage in the production or sale of tobacco products and be it further

RESOLVED, that the AMA Delegates from West Virginia present a resolution to the AMA calling upon all physicians not to engage in the production or sale of tobacco products.

## Resolution No. 8 *(Adopted)*

RESOLVED, that the WVSMA calls upon candidates for public office in WV to refuse contributions from the tobacco industry and be it further

RESOLVED, that the AMA Delegates from West Virginia present a resolution to the AMA calling upon candidates for public office to refuse contributions from the tobacco industry.

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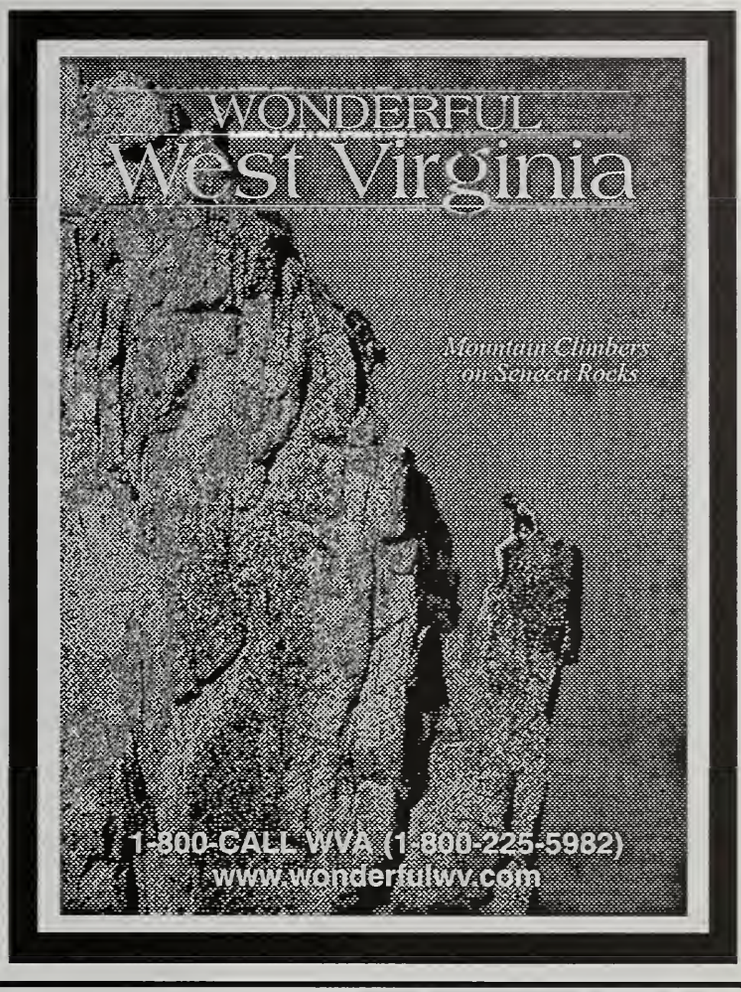


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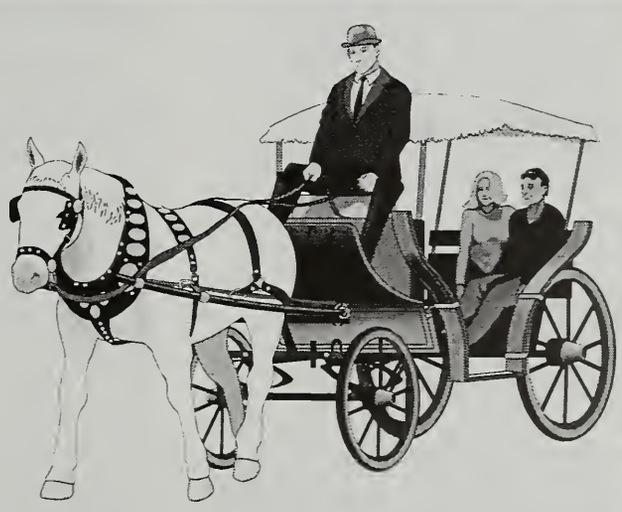

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# *Healthcare Summit 2000* planned for Aug. 24-27 at The Greenbrier

Mark your calendar and plan to attend *"Healthcare Summit 2000: Practical Tips with Powerful Results for Physicians & Organized Medicine,"* this year's WVSMA meeting at The Greenbrier, which will take place from Aug. 24-27. Topics for the meeting are designed to be of interest to both physicians and their office staffs.

Pre-conference events for the summit are set for Thursday, Aug. 24. These include an Executive Committee meeting; a pre-conference retreat for members of the WVSMA Executive Committee, Council, and component society leaders; a Council meeting and a reception.

On Friday morning Aug. 25, the summit will officially convene with specialty society meetings and concurrent sessions. These sessions will include a Loss Control Seminar by Medical Assurance, a component society leadership summit, as well as workshops on Internet training and exploration, and public speaking and media training. The Exhibit Hall will also open on Friday morning with visitation before the start of plenary sessions on issues pertaining to organized medicine and the medical error controversy.

At noon, the presidents of the various state medical associations who will be attending the meeting, will join together for a Lunch & Learn program to discuss health care issues in each of their states. Following Lunch & Learn, the Edmund B. Flink Address and a plenary session on fraud and abuse audits will be presented. After a break for exhibit visitation, specialty society meetings and concurrent sessions will again be conducted. Topics will include trends in physician reimbursement, Internet training and exploration, and public speaking and media training. The day's events will conclude with a reception and then entertainment by the band Phil Dirt and the Dozers.

Saturday's agenda will begin with specialty society meetings and concurrent sessions highlighting subjects such as physician/insurance relations and Healthy People 2010. A forum to discuss health care issues in the 2000 Election is tentatively planned with gubernatorial and 2nd Congressional District candidates invited to attend.

After a break for exhibit visitation, AMA President Randolph D. Smoak, Jr., M.D., will deliver his address. At noon, a Lunch & Learn program on impacting the legislative process will be presented. Tournaments for golf, tennis and volleyball will then take place and a reception is set for that evening.

On Sunday morning, a breakfast meeting is planned to discuss WVSMA health programs and then plenary sessions on pharmaceutical costs and medical confidentiality will take place. Later in the morning, the Thomas L. Harris Address will be presented, the new WVSMA officers will be installed and John D. Holloway, M.D., will deliver his inaugural address when he takes the oath of office as WVSMA president. The summit will conclude with a reception to honor the new WVSMA and WVSMAA officers.

A complete preliminary program and registration form will be mailed to WVSMA members soon and the WVSMA's Web page will be featuring the latest program details and on-line registration. A variety of registration fees are being offered for the meeting and spouses are encouraged to attend.

For more information, phone the WVSMA at (304) 925-0342.

# Delegation heading to AMA Meeting

This year's AMA Annual Meeting in Chicago will take place June 11-15.

The WVSMA's delegation will include the following members: Delegates Constantino Y. Amores, M.D.; James D. Helsley, M.D.; and John D. Holloway, M.D.; Alternate Delegates Thomas H. Chang, M.D.; James L. Comerci, M.D.; and Joseph B. Selby, M.D., who will also be an alternate delegate for the Young Physicians' Section. Dorian J. Williams, M.D., will be serving as the WVSMA's delegate to the Young Physicians' Section.

Other members of the delegation include WVSMA President Phillip R. Stevens, M.D.; Vice President Ahmed D. Faheem, M.D.; Council Chairman David W. Avery, M.D.; and WVSMA Executive Director Evan Jenkins. In addition, Hadassah Frye and James Campbell of Marshall University will be the delegate and alternate delegate to the AMA's Medical Student Section, and medical students Julia Pasquale and John Campbell of Marshall University will be attending the meeting as non-voting participants. WVSMA's Junior Councilor-at-Large Ronald E. Cordell, M.D., will also be attending the meeting as a delegate representing the American College of Radiologists to the AMA.

## Children's Coalition honors Sen. Walker

**Senator Martha Yeager Walker visits with children and a staff member at Fort Hill Child Development Center in Charleston, where she was honored by the members of the Coalition for West Virginia's Children as the recipient of their Legislator of the Year Award. Amy Tolliver (center), who is chairperson of the Coalition and government relations specialist for the WVSMA, presented the award in honor of Senator Walker's tremendous contributions to the children and families of West Virginia.**

# New WV Health Care Decisions Act topic of WVNEC Fall Forum

The West Virginia Network of Ethics will present a course entitled *"Making Decisions for Incapacited Patients: The New WV Health Care Decisions Act"* for its Fall Forum on August 18.

The Legislature passed the WV Health Care Decisions Act during its 2000 session. This act repeals the Natural Death Act, the Medical Power of Attorney Act and the Health Care Surrogate Act. It includes a number of features to improve end-of-life care in WV and provides new, easier-to-use Living Will and Medical Power of Attorney forms. Health care professionals and institutions need to be aware of the changes in the law to care for patients who lack decision-making capacity, to counsel patients about advance directives as required by the federal Patient Self-Determination Act, and to avoid possible disciplinary action by the applicable licensing board for failing to honor advance directives.

The WVSMA and the WV State Bar are co-sponsoring this course which will feature speakers Alvin H. Moss, M.D., and Jacqueline J. Glover, Ph.D., of the Center for Health Ethics and Law at WVU; Delegate Vicki Douglas; Jack Schwartz, J.D., of the Office of the Attorney General for the State of Maryland; Sandra A. Price, J.D., of WVU; Charleston attorneys Gil DeLaura, J.D. and Patrick D. Kelly, J.D.; Charles F. Conroy, Jr., of the Bureau for Senior Services in Charleston; Marybeth Vallance, M.S.W., of St. Mary's Hospital.

All health care professionals are invited to attend this CME course and the target audience includes physicians, nurses, social workers, clergy, administrators, attomeys and students.

To register or obtain more information, contact Linda McMillen at lmcmillen@wvu.hsc.edu or (304) 293-7618.

# *PEIA's tobacco cessation benefit to begin July 1*

PEIA will offer a new benefit to assist members in quitting the use of tobacco products beginning July 1. The program is designed to work as follows:

1) The interested member will call the Quit Line: 1-877-YNOT-QUIT or 1-877-966-8784.
2) Members will be screened for eligibility and readiness.
3) If a member is interested in nicotine replacement products or bupropion, he/she will be referred to his/her physician. PEIA will cover prescription and non-prescription smoking cessation products. Non-prescription products will be covered only if dispensed by prescription.
4) Prescriptions will be covered by PEIA with the usual co-payments for 12 weeks, based upon whether the product is generic, brand preferred or brand non-preferred.
5) If the member is interested in counseling services, the Quit Line staff will provide coaching to help them through the process. The member may also choose to use *only* the phone coaching services or printed informational materials.
6) The member is permitted to access this coverage twice per lifetime, once per plan year.
7) Follow-up will be conducted by the Quit Line to determine success/relapse rates.

Pregnant women will be offered 100% coverage for tobacco cessation during any pregnancy. Teenagers will be offered phone coaching services and printed materials only, unless nicotine replacement therapy is ordered in writing by a physician.

PEIA will pay for an office visit associated with smoking cessation. To be reimbused for this service, bill with the primary diagnosis code 305.1 Tobacco Use Disorder with CPT code 99211. The patient will be responsible for the $10 preventive care office visit co-pay.

# Flying Physicians Association combines aviation, medicine

**Clarksburg cardiologist Dr. George Shehl is pictured in front of his Beech Bonanza A-36 airplane. He has been a member of the Flying Physicians Association since 1981 and he is a certified commercial pilot, a certified flight instructor and a certified instrument flight instructor. Since 1995, Dr. Shehl has been an appointed FAA safety counselor and he conducts aviation safety seminars. He has 4,000 total hours of flying time.**

The Flying Physicians Association (FPA) is a non-profit membership organization comprised of physicians who are also licensed pilots. It is dedicated to the promotion of continuing medical and aviation safety education and human interests projects relating to medicine and aviation. The FPA is a co-sponsor of The Trelawny Outreach Project, a volunteer medical clinic in Jamaica.

There are five regional chapters of the FPA associated with the national organization: Dixie, Great Lakes, Northeast and Western. Each region holds two meetings per year and this year's national convention will take place July 2-7 in Washington, D.C. WVSMA members who are also members of the Flying Physicians Association include Dr. George Shehl *(who is pictured above)*, Dr. Joe Jarrett and Dr. Diane Shafer.

For more information about the FPA, call 1-888-DrPilot or visit the FPA web site at www.FPADRS.org.

# *Pathology Seminar deemed a success*

The Seventh Annual Seminar in Pathology, which was held May 6-10 at the Sheraton Station Square Hotel in Pittsburgh, was sponsored by United Hospital Center of Clarksburg to raise funds for Health Access, a free clinic in Clarksburg. A total of 204 pathologists and cytologists registered for the meeting which was organized and directed by Chinmay K. Datta, M.D., Ph.D., a pathologist at UHC.

"This kind of a fund-raising seminar is unique," Dr. Datta said. "Part of the registration fee is tax deductible as a charitable deduction. About 50% of the participants had attended before which indicates its immense popularity."

More than $3,000 was raised from the seminar and will be donated to Health Access. Dr. Datta would like to thank the many individuals who added to the success of this event.

# *Plans set for Annual FP Weekend/Sports Medicine Conference*

The Family Medicine Foundation of West Virginia will hold its 14th Annual Family Practice Weekend and Sports Medicine Conference at the Radisson Hotel in Huntington from November 17-19.

Topics to covered at this year's meeting will include sports medicine, injury rehabilitation, wrestling injures, ankle injuries, eye injuries, facial & nose bleeds, a cardiovascular update, allergies, Alzheimer's disease, anti-infectives, arthritis, osteoporosis, diabetes, influenza, hypertension, hyperlipidemia, pain management, improving the quality of health care, endoscopic sinus surgery, voice disorders, dental issues in athletes, performance enhancement, pediatric athletes, vertigo and asthma. The program has been reviewed and is acceptable for 22.0 prescribed hours by the AAFP.

Special sports celebrity for this year's meeting will be Rowdy Gaines, the winner of three Olympic gold medals in swimming at the 1984 Summer Olympic Games. He will present a lecture entitled *"Dealing with an Illness as a Professional Athlete,"* on Sunday, Nov. 19 at 1 p.m.

For more meeting details, phone Chris Ferrell at (304) 765-7839.

# World Alzheimer Congress planned for Washington, D.C.

World leaders in Alzheimer's research and care will unite for the first time at *"World Alzheimer Congress 2000: With Change in Mind,"* which will be conducted in three events from July 9-18 at the Washington Hilton and Towers in Washington, D.C.

The areas of discussion for the various segments of the conference will include *"Pivotal Research,""Bridging Research and Care,"* and *"Creative Care."*

For more information, phone (312) 335-5813 or visit the web site at www.alzheimer2000.org.

# CME & Special Events

## Camcare Health Educ. & Research Institute

***"How to Mentor Students in the Research Process"***
June 21, noon, *(Research Lunch & Learn Session)*, CAMC General Division, Rooms 101-102, Charleston

***"Advanced Cardiac Life Support Provider Course"***
June 26-27, Sept. 30-Oct. 1, Nov. 17-18 & Dec. 9-10, 8 a.m. - 4:30 p.m., Robert C. Byrd HSC, Charleston

***"Drug/Herbal Interactions"***
June 28, noon, Kristy Lucas, Pharm.D., Summers County ARH, Hinton

***"Pediatric Emergenices"***
July 18, 6:30 p.m., Gordon Green, M.D., Roane General Hospital, Spencer

***"Herbal Medicine"***
July 26, noon, Shelda Martin, M.D., Summers County ARH, Hinton

***"11th Annual Respiratory Care Seminar"***
Sept. 13, George L. Zaldivar *(program chairman)*, Robert C. Byrd HSC of WVU, Auditorium, Charleston

***"Pediatric Advanced Life Support Renewal Course"***
Sept. 18, Nov. 17 & Dec. 10, 8 a.m. - 4:30 p.m., Camcare Institute Education and Training Center, Charleston

**"Advanced Cardiac Life Support Renewal Course"**
Sept. 29, Nov. 16 & Dec. 8, 8 a.m. - 4:30 p.m., Robert C. Byrd HSC, Charleston Division

## Huntington Medical Education Foundation

***"An Overview of Interventional Radiology"***
June 19, 6 p.m., Paul Capito, M.D. *(for the medical staff at Three Rivers Medical Center)*, Louisa, Ky.

***"Type 2 Diabetes Mellitus"***
June 21, 6 p.m., William Jennings, M.D. *(for the medical staff at Williamson Appalachian Regional Hospital)*, South Williamson, Ky.

***"Complimentary Medicine"***
June 22, noon, Henri Roca, M.D., L.M.T., N.C.B.M.T., C.C.H. *(for the medical staff at Pleasant Valley Hospital)*, Point Pleasant

***"New Guidelines for Tuberculosis"***
July 26, 6 p.m., Harry Tweel, M.D., *(for the medical staff at Williamson Memorial Hospital)*, Williamson

***"TBA"***
July 27, noon *(for the medical staff at Pleasant Valley Hospital)*,Point Pleasant

## The Joan C. Edwards School of Medicine at Marshall University

***"10th Annual Cancer Conference"***
Sept. 15, 8 a.m., St. Mary's Hospital, Huntington

***"14th Annual Alumni Weekend Conference: Women's Health"***
Sept. 27-29

***"CME Special: Palliative Cancer Care"***
Oct. 13, 7:30 a.m., Robert Twycross, D.M., F.R.C.P., F.R.C.R., Oxford University

## Robert C. Byrd HSC - Morgantown

***"11th Annual Otolaryngology Conference"***
June 23-24 *(sponsored by WVU Dept. of Otolaryngology)*, Robert C. Byrd HSC , Morgantown

***"Advanced Life Support in Obstetrics"***
July 28-30*(sponsored by the WVU Dept. of Family Medicine)*, Canaan Valley Resort, Davis

***"Neurosciences Teaching Weekend"***
Sept. 15 *(sponsored by the WVU Depts. of Neurology and Neurosurgery)*, Robert C. Byrd HSC , Morgantown

***"Wild Wonderful West Virginia Anesthesia Review"***
Sept. 17-20 *(sponsored by the WVU Dept. of Anesthesiology)*, Oak Hill

***"26th Annual Hal Wanger Family Medicine Conference"***
Oct. 5-7 *(sponsored by the WVU Dept. of Family Medicine)*, Robert C. Byrd HSC, Morgantown

***"Fall Cancer Conference: Novel Approaches in Lung Cancer Management"***
Oct. 20 *(sponsored by Mary Babb Randolph Cancer Center and the WVU Dept. of Medicine,* Robert C. Byrd HSC, Morgantown

***"Pediatric Oktoberfest 2000: Asthma, Allergy and Immunology"***
Oct. 27 *(sponsored by WVU Dept. of Pediatrics)*, Robert C. Byrd HSC, Morgantown

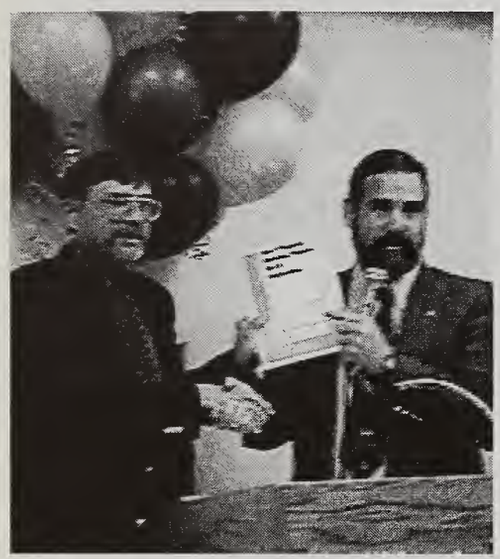
## West Virginia State Medical Association

***"Healthcare Summit 2000: Practical Tips with Powerful Results for Physicians and Organized Medicine"***
Aug. 24-27, The Greenbrier, White Sulphur Springs

# Bureau for Public Health News

***This page paid for by the West Virginia Bureau for Public Health.***

## Bureau creates resource book to help improve health of minorities



**Dr. Henry Taylor, commissioner of the Bureau for Public Health, and Alan Holmes, director of the Office of Epidemiology and Health Promotion for the BPH, unveil the first copy of the *West Virginia Healthy People 2010 Objectives*.**

For over a year, the WV Bureau for Public Health has been compiling and investigating the most current information available regarding the health status of the state's minority populations. This has involved many hours of research and examination by the Minority Health Program, the Health Statistics Center, the Office of Maternal and Child Health, the Office of Rural Health Policy and others within the Bureau for Public Health and the Dept. of Health and Human Resources. The *West Virginia Minority Health Chart Book 1999* has been prepared as a resource to assist communities, health care planners and policymakers in developing strategies to improve the health of West Virginia's minority populations. It is the first of it's kind in the Mountain State.

The *West Virginia Minority Health Chart Book 1999* illuminates the significant challenge that lies ahead for individuals in the public health and health care communities. Death rates from heart disease, diabetes and prostate cancer are significantly higher among African Americans than Caucasians. African Americans are disproportionately affected by certain infectious diseases as HIV, AIDS, gonorrhea and chlamydia. White women develop breast cancer more often than black women.

The Minority Health Chartbook is a valuable tool in identifying specific goals for the health-status of West Virginia's minority populations. It is the role of those in the health community to meet the challenge of providing skills, education and care necessary to protect all West Virginians. We must take steps to assure that no one is left behind because the health of every West Virginian is important.

In February 1998, President Clinton challenged America to eliminate health risk disparities in minority populations by the year 2010 in six key categories: infant mortality, diabetes, heart disease, cancer HIV/AIDS and immunizations. In January, this initiative was advanced by the national Healthy People 2010 program, which will serve as a "roadmap" for improving the health status of all Americans. The primary goals of this initiative are to extend the years of healthy life while eliminating health status disparities.

In May during the annual State Health in Education Council Conference at Canaan Valley, the first copy of the *West Virginia Healthy People 2010 Objectives* was officially presented to Public Health Commissioner Dr. Henry Taylor. The publication was created by the Healthy West Virginia Coalition and coordinated by the Bureau's Office of Epidemiology and Health Promotion. It is the result of a year-long process involving over 300 people from a wide variety of backgrounds meeting statewide in separate focus groups to identify the objectives for prevention and health promotion efforts in West Virginia for the next 10 years. Special care was taken by these groups in developing objectives that are relevant, realistic, measurable and attainable.

By setting specific objectives that can be embraced by the entire pubic health community statewide, we can achieve greater outcomes than any individual group could ever attain alone. It is mportant that we all work together to insure that the goals set forth in the *West Virginia Healthy People 2010 Objectives* are met or exceeded.

## Public Health Calendar

### June

National Safety Month

Eye Injuries Prevention Month

Fireworks Safety Month

Community Health Month

Nursing Assistants Week (1-8)

Men's Health Week (12-18)

National HIV Testing Day (2)

### July

Hemochromatosis Screening Awareness Month

Refractive Disorders Month

Staff Development Week (2-9)

Therapeutic Recreation Week (9-15)

Academy of General Dentistry's SmileLine
*(Free dental hotline with an Academy member 800-764-5333)*

# Poetry Corner

## You Might Be A Medical Student . . .

If you ever use the word "sphincter" at the dinner table . . .
*You might be a medical student.*

If you've ever fallen asleep while holding a retractor . . .
*You might be a medical student.*

If you've ever said "I'm sorry" or "I don't know" fifteen times in one hour . . .
*You might be a medical student.*

If you have a favorite disease . . .
*You might be a medical student.*

If GVA and GSA still mean nothing to you . . .
*You might be a medical student.*

If you're not sure what you'd do if you found an addressed, stamped envelope on the sidewalk . . .
*You might be a medical student.*

If you ever had to work as a team to retract a pannus . . .
*You might be a medical student.*

If you're still waiting to see your first optic disk . . .
*You might be a medical student.*

If your spouse is no longer willing to be your guinea pig . . .
*You might be a medical student.*

If you claim to ask every question on the Flink Form . . .
*You might be a medical student.*

If you ever contaminated the field and breathed a sigh of relief when no one noticed . . .
*You might be a medical student.*

If you've delivered more placentas than babies . . .
*You might be a medical student.*

If you're 26 and never had a real job . . .
*You might be a medical student.*

If your student loan payment is greater than your house payment . . .
*You might be a medical student.*

If you are graduating this weekend . . .
*You might be a medical student.*

*Scott Young, David Watson and Brent Watson*
*WVU School of Medicine Class of 1999*
*Faculty/Senior Banquet, May 14, 1999*

# Robert C. Byrd Health Sciences Center of West Virginia University News

## McFadden named chair of Surgery

McFadden

Dr. David W. McFadden has been named chair of the Dept. of Surgery.

Dr. McFadden joins WVU from the UCLA School of Medicine where he has been the chief of general surgery and a professor of surgery since 1994. Other positions held by Dr. McFadden include director of general surgery of cell growth and regulation program, general surgery clinic director and chief of general surgery.

Dr. McFadden, who earned both his M.D. and B.A. from the University of Virginia, specializes in intestinal and gastrointestinal disorders.

## WVU seniors choose training sites

American medical school seniors learned recently where they will complete their training. At WVU, 72 percent of this year's class will enter programs in primary care fields that are in demand in the state.

The Class of 2000 will have 82 graduates, 81 of whom participated in the national residency matching program that links graduates with training slots in their preferred specialties, according to Dr. Norman D. Ferrari III, associate dean for student services and academic progress in the WVU School of Medicine.

Seventy percent of the WVU seniors were matched with their first choice of residencies, and 87 percent to one of their first three choices. Thirty-four students will train in West Virginia; the rest will take training posts at hospitals in 15 other states.

## Surgeon performs heart bypass without heart-lung machine

Almost every day, WVU surgeon Dr. Jose Cruzzavala does what few thought was possible a decade ago: he performs a bypass operation on a beating human heart.

"There's a very good chance that this will soon become the standard for heart bypass surgery," says Dr. Cruzzavala. "About four out of five bypass operations can be done without the heart-lung machine."

The heart-lung machine saved the lives of thousands who would otherwise have died from heart failure. But the machine also exacts a toll from patients: increased risks of stroke, blood loss and weight gain, and sometimes even memory loss, confusion, and personality changes.

Dr. Cruzzavala and other surgeons around the country began trying bypass operations without the heart-lung machine: isolating the blocked artery and immobilizing it, and then sewing the bypass into place. "It's more demanding for the surgeon, but better for the patient," he says. "After surgery, when you walk into the cardiac unit, you can tell which patients had this treatment. They're more alert, they're thinking clearly."

The surgery is not suitable for all bypasses and can't be attempted on people with small coronary arteries.

## New scanners enhance patient care

WVU Hospitals recently purchased two new scanners from GE Medical Systems for $1.5 million each that will significantly improve patient care.

The new scanners are the world's first to allow doctors to simultaneously capture multiple images of a patient's anatomy and are up to six times faster than traditional CT scanners. WVU is the only health care facility in the state with this capability.

In addition to trauma cases, this new CT scanner called Lightspeed, has the potential to significantly reduce diagnostic time and increase image clarity for the diagnosis of cancer, spinal injuries, pediatric conditions, blood clots and cardiac conditions.

## Besarab new section chief of Nephrology

Dr. Anatole Besarab is the new section chief of nephrology, coming to WVU from Henry Ford Hospital in Detroit.

From 1975 to 1994, Dr. Besarab was at Thomas Jefferson University. Educated at the University of Pennsylvania and trained in Philadelphia and Boston. He is an expert in caring for dialysis patients and has a special interest in anemia management and vascular access care.

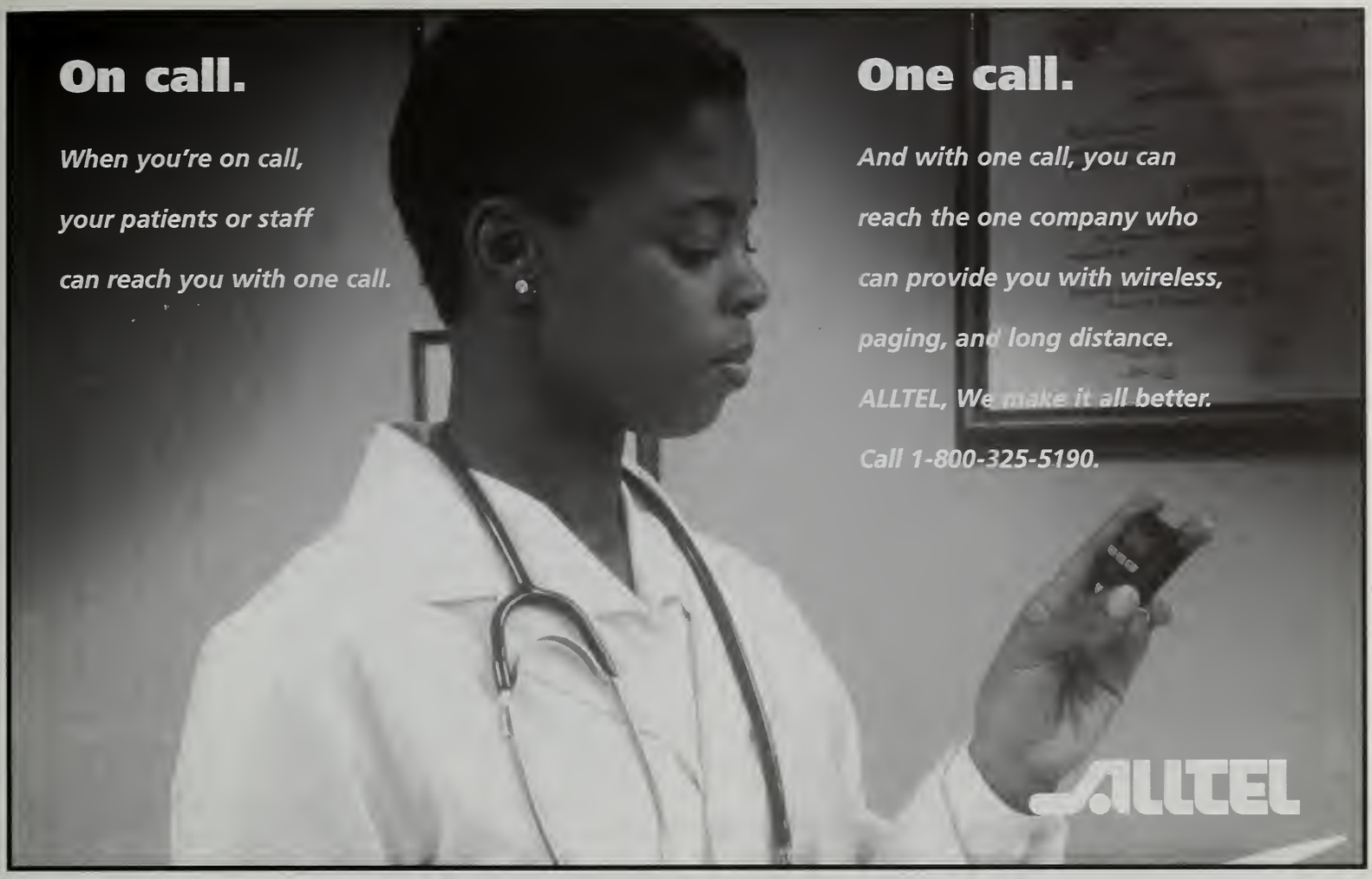
## Dr. Klinkhachorn honored for teaching

Dr. Penprapa Klinkhachorn, anatomy, was one of six faculty members who received the WVU Foundation Outstanding Teacher Award this year. She was also the recipient of the School of Medicine's Distinguished Teacher Award last year.

## Russian student wins Van Liere award

Vera Voronina, a third-year biochemistry graduate student from Russia, was the top presenter at the E.J. Van Liere Memorial Research Convocation earlier this month.

Voronina's presentation was called *"Mutations in the Human RX Gene in Patients with Anopthalmia and Microphthalmia."*

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# The Joan C. Edwards School of Medicine at Marshall University

## School named in honor of philanthropist Joan C. Edwards

The School of Medicine has been named in honor of philanthropist Joan C. Edwards, MU President Dan Angel announced May 6.

The Joan C. Edwards School of Medicine at Marshall University becomes the first medical school in the U.S. to be named for a woman.

"Mrs. Edwards has been a substantial partner in helping our university serve the people of our region," Dr. Angel said, noting her multimillion-dollar contributions that are supporting medical school scholarships and other MU programs. "We are pleased to honor her for her extraordinary sense of civic responsibility," he said. "Mrs. Edwards' efforts are having a profound impact on the Huntington area, particularly in the areas of health care services and the arts."

Mrs. Edwards is contributing $2 million to the School of Medicine to begin the planning, design and development of the Joan C. Edwards Children's Cancer Pavilion. She has provided in her will for an additional $16 million to come to Marshall to construct and operate the center, which is to be built on the Cabell Huntington Hospital campus.

Dean Charles H. McKown, M.D., said children will reap the benefits of Mrs. Edwards' generosity for decades.

"Children with cancer represent one of the greatest, most complex medical challenges today — even more challenging than malignancies in adults," Dr. McKown said. "It requires vigorous, integrated care to obtain the favorable outcomes that are now within our grasp."

## MU again receives FP award

The School of Medicine has again been honored by the American Academy of Family Practice as one of the nation's leading schools in producing a high percentage of graduates who enter family practice.

Dr. Robert B. Walker, chair of the Department of Family and Community Health, accepted a Bronze Percentage Award during a conference of the Society of Teachers of Family Medicine May 5. The award honors schools that had at least 20 percent of their graduates entering family practice residencies between 1997 and 1999.

"We're extremely pleased and gratified to receive this award, because it means we're doing what we're supposed to be doing," said Dean Charles H. McKown, M.D. "There's something extra special about getting the award again this year. This makes the ninth year in a row that we have received these awards. This consistent performance puts us in a very select group in terms of leadership in primary care medicine."

## Hypertension article by Gress et al published in *NEJM*

Thiazide diuretics and beta blockers carry much less risk of causing diabetes than previously believed, Dr. Todd Gress of Marshall University and other doctors reported in the *New England Journal of Medicine* March 30.

Dr. Gress and researchers at Johns Hopkins and elsewhere studied whether drugs for hypertension increased patients' risk of developing type 2 diabetes. Thiazide diuretics, long thought to increase the risk of diabetes, did not increase the risk at all, Dr. Gress said. Patients who took beta blockers had a 25 percent increased risk of diabetes. That is a much lower risk than indicated by previous research, which Dr. Gress said had suggested as much as a three- to four-fold increased risk. ACE inhibitors and calcium channel antagonists showed no increased risk of diabetes.

"Our most striking finding was that much of the diabetes risk associated with the use of blood pressure medications appears to be explained by the hypertension itself," Dr. Gress said. "Overall, people who had hypertension were nearly two and a half times more likely to develop type 2 diabetes than people without high blood pressure."

Dr. Gress said the main implications are:

1) researchers need to determine why high blood pressure is linked to diabetes, and physicians need to treat their hypertensive patients as people at higher risk for diabetes;
2) physicians can prescribe thiazide diuretics without undue concern that they will lead to diabetes, since no such link appeared during the six-year study; and
3) physicians who are considering prescribing beta blockers should weigh the increased risk of diabetes against their proven benefits in reducing cardiovascular risk.

## FP popular among 2000 grads

Graduates of the School of Medicine will enter family practice residencies at a rate nearly twice the national average.

Of the 45 students entering residencies next year, 12 will enter family practice — a rate of 26.7 percent, compared to 13.5 percent nationally. MU was 10 percent above the national average in graduates entering pediatrics. Overall, 64.4 percent of MU grads will enter residencies in the primary care fields of FP, internal medicine, pediatrics, and obstetrics and gynecology. Fifty-one percent of MU grads are entering residencies in WV. Of those going out of state, four will go to the Mayo Graduate School of Medicine, two to Vanderbilt University, and two to the University of Virginia.

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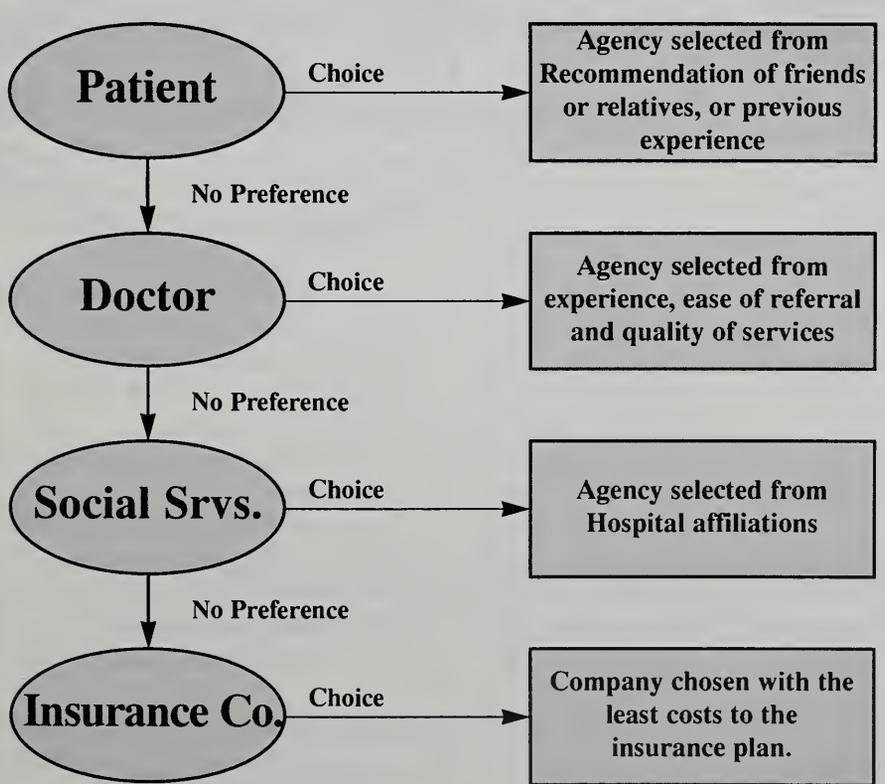
# Healthcare — Who's Choice is it?

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# West Virginia School of Osteopathic Medicine News

## *U.S. News* rates WVSOM high in graduate school rankings

**WVSOM has been ranked in the Top 50 primary care medical schools by *U.S. News & World Report*. The magazine also ranked the school #22 nationwide in the 2001 edition of *"Best Graduate Schools."* In addition, WVSOM was again awarded the "Program of Excellence" designation by the University of West Virginia Sytem.**

The West Virginia School of Osteopathic Medicine has been ranked in the Top 50 primary care medical school in the nation by *U.S. News & World Report* magazine for the second year in a row. The school is also ranked #22 nationwide in the 2001 edition of the magazine's publication "Best Graduate Schools," which places it five notches higher than last year ratings.

"This is a wonderful affirmation," says WVSOM President Olen E. Jones, Jr., Ph.D. "This ranking tells us that we are meeting our stated mission of providing family practice and primary care physicians for West Virginia and Appalachia," Dr. Jones says, noting that WVSOM was ranked #27 in last year's rankings.

WVOM was among three osteopathic colleges on the list. The most telling statistic in the rankings was the category of *"Percent of Physicians Entering Primary Care."* Over the last three years, 93% of WVSOM graduates have entered the primary care fields of family practice, internal medicine, pediatrics and obstetrics/gynecology. WVSOM was the top med schools among the 50 schools ranked in this category.

In addition to the high rankings bestowed upon WVSOM by *U.S. News & World Report*, the school was once again awarded the "Program of Excellence" designation by the University of West Virginia System.

## Dr. Wager elected president of WV Society of Osteopathic FPs

Marlene Wager, D.O., professor of geriatrics at WVSOM, was recently elected president of the West Virginia Society of Osteopathic Family Physicians.

In her new position, Dr. Wager will ensure that WVSOM graduates who are practicing family medicine have access to the broadest possible resources for the advancement of their practices. She also will be responsible for overseeing membership recruitment, CME and keeping family physicians aware of governmental practices that affect their practices, as well as serve as the state liaison with the American College of Osteopathic Family Physicians.

## Surgeon General visits WVSOM

Lieutenant General Ronald R. Blanck, D.O., the Surgeon General of the United States Army, visited the WVSOM campus on April 18.

General Blanck talked to faculty, staff and students during a luncheon sponsored by the Student Government Association. "I love the Army because I can practice medicine at the highest possible level," he said. "It's the highest of the 'high-tech medicine out there.'"

In addition to talking about his career in the Army, Gen. Blanck dispensed advice to students in the audience.

"Never get caught in the trap of dealing with a disease instead of the patient. Listen to your patients and be sympathic to their needs, worries and fears. And learn to balance your patients' needs, your needs, and the needs of your family. Give each equal attention and don't let one area lag behind another."

Gen. Blanck was sworn in as the 39th Surgeon General of the Army in Oct. 1996. He also serves as the Commander of the U.S. Army Medical Command, headquartered at Fort Sam Houston, Texas.

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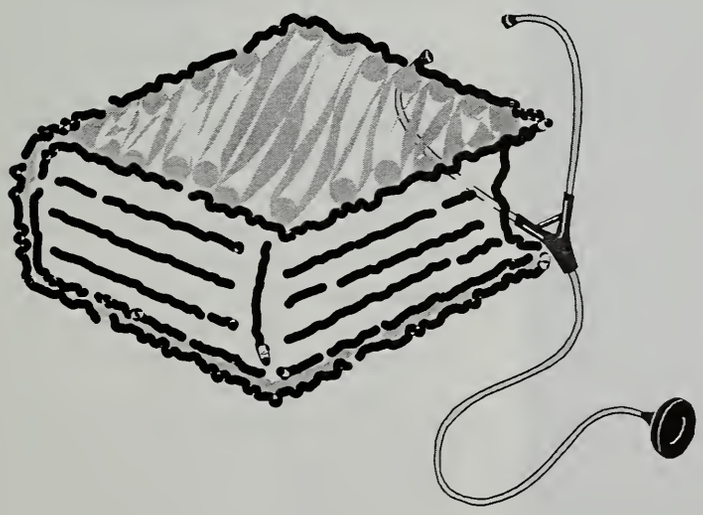

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# New Members

It is a pleasure to welcome these physicians and medical students who have recently joined the WVSMA:

## Cabell County

John A. Battin, MD
Adel A. Ibrahim, MD
Edward R. Setser, MD
Donald P. Stacks, MD

## Eastern Panhandle

Timothy K. Bowers, MD
Hernando Jimenez, MD
Paul M. Julien, MD
Peter G. Teichman, MD

## Greenbrier Valley

Connie Perkins, DO

## Hancock County

John Metcalf, MD
Hardev S. Parihar, MD

## Harrison County

Richard A. Douglas, MD

## Kanawha County

Osterman Cotes, MD
E. Antonio Daia, MD
Glen Goldfarb, MD
James D. Felsen, MD
Kuruvilla John, MD
Bernard J. Luby, MD
Pamela M. Phillips, MD
Mary C. Pozega, DO
Desingu S. Raja, MD
Ned T. Shanmugham, MD
Alatheia Stickler, MD
Sasidharan Taravath, MD
Amy L. Wirts, MD
Lawrence M. Wyner, MD

## Marion County

Frederick J. Gabriele, MD

## Marshall County

Michael J. Maroney, MD

## Mason County

Michael W. Corbin, DO

## Monongalia County

Abdulkader Al-Azzaz, MD
Jack Bergstein, MD
Anatole Besarb, MD
James Burns, MD
Sara L. Cuthill, MD
Tony Diehl, MD
Ryan Finkenbine, MD
Christopher Grande, MD
Abdullah Kallah, MD
Susan Lynch, MD
Chris Martin, MD
Ronald D. McFadden, MD
Charles Mullett, MD
Lakshmikum Pillai, MD
Christian Schunn, MD
Ajay Sheikh, MD
Clark Springs, MD
Bonita F. Stanton, MD
Cynthia L. Walsh, MD
Lee Wiley, MD

## Ohio County

Lee R. Bischof, MD
Adel E. Frenn, MD
Chandra S. Swamy, MD

## Parkersburg Academy

Kevin L. Burner, MD
Kenneth T. Miller, MD
Terry C. Shank, MD
Lora L. Westfall, MD

## Raleigh County

Cordell R. Honrado, MD

## Tygarts Valley

Joel H. Hummer, MD
Terry S. Hummer, MD

## Wetzel County

Victoria L. Shuman, DO

## Resident Physicians

Christina J. Canody, MD
David B. Leventer, MD
Rhonda L. Mejeur, MD
Gauri V. Pawar, MD
Kenneth A. Veselicky, MD
Norman E. Wood, MD

## Medical Students

### MU School of Medicine

Jessica B. Turner
Kerri L. George
Allen M. Gomez
Allen J. Holmes
Stephen R. Kennedy
Debra Salim
Kimberly M. Druff
Kristin Anderson
John E. Campbell
Benjamin L. Allan
Jeremy D. Fuller
Shannon L. Smith
Amy C. Whitt
Erik B. Hurst
Bill H. Boshell
Marcia M. Walker
Jeffrey M. Cook
Jessica Antoszewski
James R. Campbell II
Christopher C. Treadway
Karen Miller
Eliza E. Robertson
Leela Vadrevu Raju
Julia L. Pasquale
Carrie M. Lockhart
Sharon Dy Lao

Gregory S. Krivonyak
John W. Seal, III
Hadassah D. Frye
Laura S. Feaster
Tawnya L. Bolt

## WVU School of Medicine Morgantown Campus

Preeti Bhanot
Natalie Needham Horsman
Katherin M. Morrison
Carl L. Kinder
Sheetal Patel
Tyler J. Prouty
Jessica L. Wright
Arvind Vasudevan
Michael Wolfe
Mona Iskander
Christopher Kolibash
Natalie G. Shaheen
Erin L. White
Maple Landvoight
Cory L. Vanhoff
James R. Cox, II
Amy B. Norton
Jason M. Yonker
Brian K. Richardson
Jason A. Moreland
Jennifer R. Molano
Dan Chaksupa
Christopher R. Antolini
Jodi E. Wheeler
Jessica D. Talley
Sara D. Walker
Giridhar V. Vedula
William B. Strauch
Julie C. Symonds
Stephen Tate
Jaime L. Thompson
Patricia J. Thomson
Letitia E. Tierney
David C. Tingler
Julie D. Triggs
Raina J. Sobota
James R. Romanowski, II
Sachin V. Phade
Ihtishaam Qazi
Heather N. Ross
Michele C. Overlease
Steven Parker
Ami M. Patel
Aaron J. Provance
Bryan Pukenas
Anthony J. Renzelli
John R. Orphanos
Timothy E. Oppermann
Lauren W. Morgan
Bradley W. Mongold
Hassan R. Mir
Anand Donald R. Mishra
Jennifer E. Kuhn
Melanie L. Deweese
Suzanne L. Glarib
Valentine Gibson
Lisa A. Haynie
Melinda J. Hooton
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# AMAA representative speaks at Spring Meeting

**AMAA Field Director Ann Farris and WVSMAA President Rose Romero enjoy visiting at the dinner held at Oliverio's in Clarksburg during the Spring Board Meeting in April.**

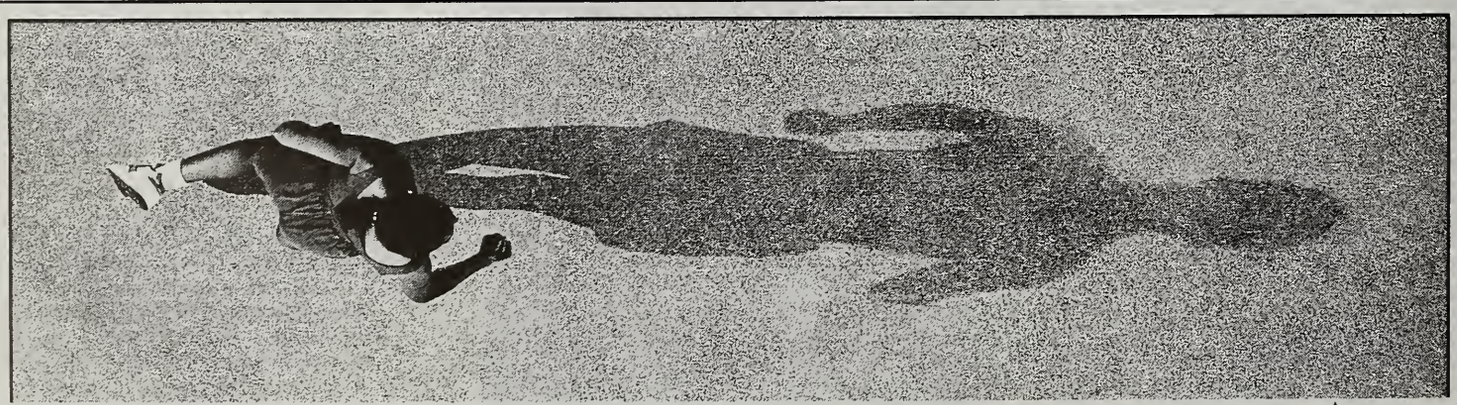
How do you keep members' interest in the Alliance and motivate them to volunteer and assume more active roles?

This was the topic tackled by Ann Farris, field director of the AMA Alliance, when she spoke at our Spring Board Meeting in Clarksburg. Ann's presentation was outstanding and was very much appreciated by the many past presidents and board members in attendance. I want to thank Harrison County Medical Alliance for hosting this productive and informative meeting. Thanks for your wonderful hospitality!

In addition to Ann's address and the business items discussed, a raffle was held for a diamond necklace at the meeting to raise funds for the AMA Foundation. Congratulations to Sawsan Galal of Beckley! Funds for the AMA Foundation were also collected by the various component societies in "moolah jugs," which are milk jugs that members place their spare change in when they hold meetings. The component society which has collected the most money during the year will receive an award at our 76th Annual Convention at The Greenbrier, Aug. 24-26.

In closing, I want to announce that the WVSMAA has received national recognition from the AMAA for our SAVE Schools From Violence billboards which various component societies have placed around the state. We are making a difference in the lives of people in our communities!

Rose Romero
President, WVSMA Alliance



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# WESPAC News

We would like to thank these physicians and Alliance members for their recent contributions to WESPAC:

## Chairman's Club ($1,000)

Sam Davis, M.D.

## Extra Miler ($500)

Anil Agarwal, M.D.
James E. Bland, M.D.
James L. Bryant II, M.D.
Mark E. Meany, M.D.
Rocco Morabito, M.D.

## Dollar-A-Day ($365)

Edward Arnett, M.D.
W. Alva Deardorff, M.D.
Terry L. Elliott, M.D.
James D. Helsley, M.D.
David E. Hess, M.D.
John Keefe, M.D.
Stephen Powell, M.D.
Aristotle Rabanal, M.D.
Ronald Wilkinson, M.D.
S. Zahir, M.D.

## Campaigner Plus ($101-$200)

Mohammed Hasan, M.D.
Charles F. Whitaker, M.D.
Shirley L. Whitaker

## Campaigner ($100)

Pedro Ambrosio, M.D.
Rogelio A. Averion, M.D.
S. Chopra, M.D.
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Thomas Douglass, M.D.
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### Alliance Representative

Kathy Fortunato
Wheeling, WV

### WVSMA Council Representative

Phillip R. Stevens, M.D.
Huntington, WV

### WVSMA Staff Member

Amy N. Tolliver

# Obituaries

## K. Douglas Bowers Jr., M.D.

Dr. Karl Douglas Bowers Jr., 64, of Morgantown died Feb. 19, 1999, at home in Morgantown.

Dr. Bowers attended West Virginia University and graduated from Jefferson Medical College of Thomas Jefferson University in Philadelphia. He interned at the Medical College of Virginia and did his residency at WVU.

Dr. Bowers specialized in orthopaedic surgery and was in private practice in Morgantown of 31 years and was a partner in Morgantown Orthopedic Associates. He developed a national reputation as a pioneer in the field of sports medicine during his tenure as a team physician at WVU, a responsibility he held for 30 years. He was also a clinical associate professor of orthopedics at the WVU School of Medicine.

Surviving: wife, Carol Sue Truman Bowers; sons, Karl III of Fort Walton Beach, Fla., Paul A. of Lawrenceville, Ga., John R. of Park City, Utah; daughter, Anne Cameron Bittinger of Morgantown; six grandchildren.

Memorial contributions may be made to Dr. K. Douglas Bowers Jr. Football Scholarship Fund, West Virginia University Athletic Endowment Fund, c/o WVU Foundation, Inc., 3168 Collins Ferry Rd., Morgantown, WV 26504, or to Trinity Episcopal Church Organ Fund, 247 Willey St., Morgantown, WV 26505.

## Harry F. Cooper, M.D.

Dr. Harry F. Cooper, 79, of Daytona Beach Shores died Sept. 15, in Halifax Medical Center, Daytona Beach, Fla.

Dr. Cooper received an A.B. degree from Concord College in 1940 and obtained his medical degree from Jefferson Medical College of Thomas Jefferson University in Philadelphia. He interned at Illinois Central Hospital in Chicago and did residencies at I.C. Hospital and Municipal TB San. in Chicago, and at the VA Hospital in Hines, Ill.

Dr. Cooper served in the U.S. Navy from 1944-46 and earned the rank of Lt. He was a surgeon in Beckley for most of his career and had been a member of the WVSMA since 1954. He was a diplomat of the American Board of Surgery and was also a member of the AMA, the Raleigh County Medical Society, Knights Templar and Beni Kedem Shrine.

Surviving: wife, Constance; sons, Conrad Fred Cooper and Kim Bryant Cooper, both of Beckley; daughters, Melodie Martin of Charleston, Yvonne Renee Raymond of Salt Lake City; sisters, Irene Bowen of Dalton, Ga., Francis Scyphers of Athens; and nine grandchildren.

Memorial contributions may be made to Beckley Area Foundation, P.O. Box 1092, Beckley, WV 25802.

## John H. Bergman, M.D.

Dr. John H. Bergman, 86, of Conway, S.C., formerly of Charleston, died Feb. 27, in Kingston Nursing Center after a long illness.

Dr. Bergman received his A.B. and medical degrees from Stanford University. He interned at Charity Hospital in New Orleans and then completed his residency at Charleston General Hospital. He was a Navy flight surgeon during World War II and served six years in the regular Navy Medical Corps.

Dr. Bergman maintained a family medical practice in Charleston for 30 years. He had been a member of the WVSMA since 1950 and was a member of Kanawha Medical Society.

Surviving: wife, Sarah Jo Bergman; sons, John G. Bergman of Winston-Salem, N.C., Dr. James Loring Bergman of Charlotte, N.C.; sister, Harriett Johnson of California; nine grandchildren and one great-grandchild.

Memorial donations may be made to St. Paul's Episcopal Church Building Fund, 710 Main St., Conway, SC 29526.

## George R. Mullins, M.D.

Dr. George R. Mullins, 81, of Logan, died Oct. 8, at Logan General Hospital.

Dr. Mullins was born Feb. 21, 1918, in Logan, the son of the late George R. Mullins Sr. and Freda Walker Mullins. He received his A.B. degree from West Virginia University in 1940, and obtained his medical degree from the University of Maryland.

After interning at Ohio Valley General Hospital in Wheeling for a year, Dr. Mullins joined the Army Air Corps and entered active duty on Oct. 22, 1943. He served as an flight surgeon for two years and saw overseas service in the Phillipines from 1945-46. He earned the rank of captain and he was decorated with a Bronze Star for assisting in the rescue of air crew members that crashed at one of the Pacific island bases where he was stationed.

After his military service, Dr. Mullins returned to Logan where he opened an office as an ear, nose and throat specialist with Dr. Davis. Shortly after they began practicing together, Dr. Davis died and Dr. Mullins moved the family to Wheeling. He only practiced in Wheeling briefly and then returned to Logan to enter a practice with his brother, Dr. David W. Mullins, who was also an E.E.N.T. In the mid-1960s, the two brothers dissolved their partnership, but both continued their separate practices. Dr. Mullins' brother died in 1982, and Dr. Mullins continued practicing until 1990 when he suffered a stroke.

Dr. Mullins had been a member of the WVSMA since 1946. He was also a member of the AMA and was a member and past president of the Logan County Medical Society. In the 1970s, Dr. Mullins authored a genealogy of the descendants of Nathanial Mullins, a captain in the Army Air Corps and a veteran of the South Pacific.

In addition to his parents and brother, Dr. Mullins was preceded in death by his wife, Mary Noyes Mullins.

Survivors include one son, George R. Mullins III of Barboursville; one daughter, Nancy L. Waldner of Hermosa Beach, Calif,; two sisters, Oma Walls of South Carolina and Virginia Valentine of North Carolina; three grandchildren and one special friend, Janet Williams.

## C. F. Whitaker, M.D.

Dr. Charles F. Whitaker, 84, of Parkersburg, died May 12, 1999, at St. Joseph's Hospital.

Dr. Whitaker was born May 11, 1915, in Titusville, Pa., a son of the late Charles F. Sr. and Anna Johnson Whitaker. He was a graduate of Allegheny College in Meadville, Pa., and the University of Pittsburgh Medical School in 1941. He did his internship at West Penn Hospital in Pittsburgh, served as a captain in the Medical Corps in the European Theater of World War II and completed an ear, nose and throat residency at Northwestern University in 1950.

Dr. Whitaker began his ear, nose and throat practice in Parkersburg in 1950, recruited to the area by this good friend, Dr. S. W. Goff. He retired from active practice in Sept. 1996. In addition to being a member of the WVSMA, Dr. Whitaker was a fellow of the American Academy of Otolaryngology, and was a member and past president of the Parkersburg Academy of Medicine, the American College of Surgeons and the WV Academy of Medicine. He also served on the faculty of the West Virginia University School of Medicine.

Dr. Whitaker was a member of the medical staffs at St. Joseph's and Camden-Clark Hospitals. He had served as president of both medical staffs and taught in both schools of nursing. He was a member of St. Andrews United Methodist Church and had served on various committees and presided as president of the official board. He was also active in Boy Scouting with Troop 2 and served as president of the Kootaga Council. He was awarded the Silver Beaver Award and was a member of the Heritage Society. In addition, he was a supporter of the arts of Parkersburg and was a member of the Masonic Lodge.

Surviving are his wife, Betsy Robinson Whitaker, whom he married June 25, 1941; three sons, Dr. Charles F. Whitaker III and Dr. Joel R. Whitaker, both of Parkersburg, and Dr. Samuel R. Whitaker of Los Angeles; one daughter, Andrea Whitaker Barnes of Columbia, Md.; five grandchildren, Charles F. Whitaker IV, Matthew L. Whitaker, Eric M. Barnes, Amy L. Whitaker and Robinson F. Whitaker; and two sisters, Lois Petrick and Judith Arnold, both of Daytona Beach, Fla. He was preceded in death by one brother, Wallin Whitaker.

Memorials may be made to the Parsonage Fund at St. Andrews United Methodist Church or the charity of the donor's choice.

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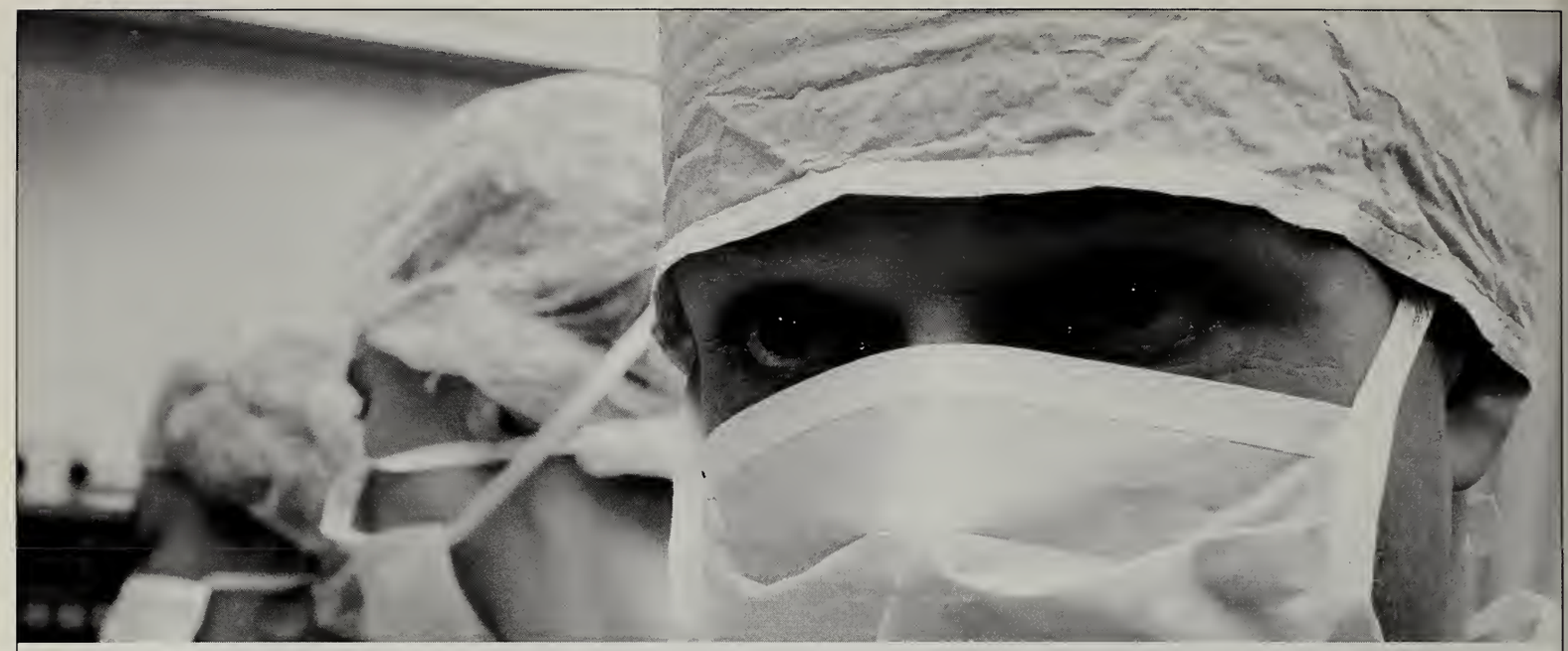

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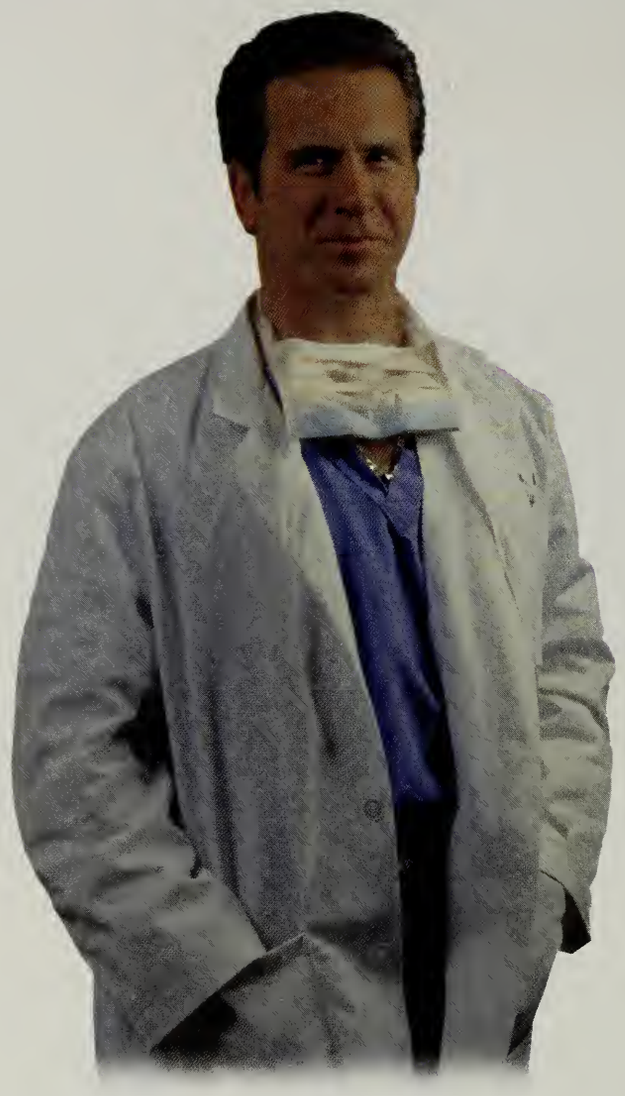

## WVU adds depth to its Neurosciences program.

WVU welcomes Dr. Julian Bailes as the chair of the Department of Neurosurgery in the West Virginia University School of Medicine.

Dr. Bailes has served as a consultant to the Pittsburgh Steelers and as the director of neurosurgery at Disney's Celebration Health Hospital in Orlando, FL. He was chief of the cerebrovascular surgery program at Allegheny General Hospital in Pittsburgh and led a $21 million Federal project to develop the National Medical Practice Knowledge Bank.

The Neurosciences Institute at WVU is committed to providing the residents of West Virginia with leading edge research combined with continuous improvements in the quality of patient care we deliver.

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## Seminars

**11th Annual Respiratory Care Seminar**
Wednesday, Sept. 13, 2000
Auditorium, Robert C. Byrd Health Sciences Center of WVU/ Charleston Division
Charleston, WV
*George L. Zaldivar, MD*
Program Chairman

**10th Annual Vascular Surgery Conference**
Saturday, Oct. 7, 2000
8 a.m. to noon
Robert C. Byrd Health Sciences of WVU/Charleston Division
Charleston, WV
*Ali F. AbuRahma, MD*
Program Chairman

**Pediatric Acute Care Conference**
Friday, Oct. 13, 2000
8 a.m. to 4:30 p.m.
Tamarack
Beckley, WV
*Manuel J. Caceres, MD*
Program Chairman

**Current Trends in Sleep Medicine**
Wednesday, Oct. 18, 2000
8 a.m. to 4:15 p.m.
Days Inn Conference Center
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*George L. Zaldivar, MD*
Program Chairman

**West Virginia Rural Health Conference**
Oct. 25 to 27, 2000
Days Inn Conference Center
Flatwoods, WV

**West Virginia Trauma Symposium**
January 18-19, 2001
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*James Kessel, MD*
*David Denning, MD*
*Peter Mucha, MD*
*David Kappel, MD*
Program Chairmen

**Cardiology Conference at Snowshoe**
Feb. 4-7, 2001
Snowshoe, WV
*William Carter, MD*
Chairman

## Life Support Training

**Advanced Cardiac Life Support Provider Course**
Sept. 30-Oct. 1, 2000
Nov. 17-18, 2000
Dec. 9-10, 2000
8 a.m. to 4:30 p.m.
Robert C. Byrd Health Sciences Center of WVU/
Charleston Division, 4th Floor
Charleston, WV

**Advanced Cardiac Life Support Renewal Course**
Sept. 29, 2000
Nov. 16, 2000
Dec. 8, 2000
8 a.m. to 4:30 p.m.
Robert C. Byrd Health Sciences Center of WVU/
Charleston Division, 4th Floor
Charleston, WV

**Pediatric Advanced Life Support Renewal Course**
Sept. 18, 2000
Nov. 17, 2000
Dec. 10, 2000
8 a.m. to 4:30 p.m.
Camcare Institute
Education and Training Center
3211 MacCorkle Ave. SE
Charleston, WV

## Outreach Programs

**Surgical Treatment of CHD**
Tuesday, Sept. 19,2000
6:30 p.m.
Roane General Hospital
Spencer, WV
*Kourosh Ghalili, MD*

**Neurological Update**
Wednesday, Sept. 27, 2000
6:30 p.m.
Summers County ARH
Hinton, WV
*Constantino Amores, MD*

**Difference Between Schizophrenia and Bipolar Disease**
Wednesday, Oct. 4, 2000
12:30 p.m.
Montgomery General Hospital
Montgomery, WV
*Martin Kommor, MD*

Camcare Health Education and Research Institute

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West Virginia State Medical Association

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***Editor***
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Charleston

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***The Spring House at The Greenbrier in White Sulphur Springs.***

***Photo courtesy of Gretchen L. Chandler, Charleston***

***Graphics Design by Joel Sites, Chapman Printing***

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# Manuscript Guidelines

All articles for the *West Virginia Medical Journal* must be submitted on an IBM compatible disk. Microsoft Word 97 is preferred, but other languages are acceptable. If the manuscript contains tables, the main body of the manuscript and references should be saved as one item, i.e., *article*, and then each table should also be saved as a separate item, i.e., *Table 1*, *Table 2*.

All scientific manuscripts should be prepared in accordance with *"Uniform Requirements for Manuscripts Submitted to Biomedical Journals."* Papers will not be considered for publication if they have already been published or are described in a manuscript submitted or accepted for publication elsewhere. All persons designated as authors should have participated enough in the work to take public responsibility for the concept.

Manuscripts should be accompanied by one extra copy, be double-spaced, have each page numbered and should include a title page, an abstract of no more than 150 words, and references numbered consecutively. No more than 10 references will be published and then a statement will appear that the author should be contacted for the other references listed in the manuscript.

Tables, figures and photos should be numbered, and indicated with parentheses whenever they are mentioned in the text, i.e. (Table 1), (Figure 1). Legends should be included for all figures and photographs.

Photos must be unmounted glossy prints in a 5 x 7 format or smaller. Black and white photos are preferred. Cost of printing photos in excess of four will be billed to the author at a cost of $13 for each photo. Each photo should have a label pasted on its back indicating its number, the author's name and an indication of its "top." Do not write on the back of photos, scratch or mar them with paper clips, or mount them on cardboard. Drawings and charts should be created in black and white.

All scientific material is reviewed by the editor and three other members of the Publication Committee. Special articles or reports are usually only reviewed by the editor. All articles should be addressed to:

F. Thomas Sporck, M.D., F.A.C.S., Editor
*West Virginia Medical Journal*
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Charleston, WV 25364

If you have questions or need more information, phone Nancy L. Hill, managing editor at (304) 925-0342.

# President's Page

## Not ready to ride into the sunset just yet

I received a phone call recently that really stunned me. Nancy Hill, journalist extraordinaire at the WVSMA, called to inform me that my last article was due for the President's Page. Farewell article? Already?

I guess I was somewhat paying attention to the calendar, but maybe not. Life can get awfully busy and distracting at times. Was my year as president really coming to an end? Not that I doubted Nancy, but I got my calendar out to check and sure enough, she was right. My year was rapidly coming to a close.

Where had the time gone? My parents had always warned me that time goes by faster as you get older, but this was ridiculous. It seemed like only yesterday that I was giving my acceptance speech. I leaned back in my chair, closed my eyes, and reflected on this past year.

It has been a truly remarkable year for me and I want to again express my gratitude to the membership for giving me the opportunity to lead this wonderful organization. A sea of change has taken place at the WVSMA and it has been very exciting to be a part of that. Our organization is truly on the move!

I am absolutely thrilled that Evan Jenkins will be able to continue as our executive director. Yes, he would have made a wonderful supreme court justice, but he will be able to help the house of medicine and our patients much more in his present position. I look forward to continuing to work with him in the years to come, and want to thank him for all of his expert assistance this past year.

I want to also express my thanks and gratitude to the staff at the WVSMA. I know I don't need to tell the membership this, but we have an outstanding staff working for us and I would not trade a single one of them. Special thanks to Nancy for her help with my articles, and to Shirleen for always making sure that I arrived at my engagements at the appointed date and time.

One of the biggest changes at WVSMA has been the addition of a director of health programs. Helen Matheny is the director and she has been doing a marvelous job. She is a whirlwind of activity. Grants are being written and meetings are taking place. We are working closely with Dr. Henry Taylor, the commissioner of the Bureau for Public Health, and many others to add our expertise and knowledge about these vitally important programs. I want the WVSMA to be at the forefront of public health initiatives.

The other major change has been the addition of a full-time lobbyist. Our Government Relations Specialist Amy Tolliver is a veteran of many years of working at the WV Legislature and is also doing a great job. Without a doubt, we have the best lobbying team in the state at the Capitol.

I am also very excited about the physician leaders at WVSMA. I leave the presidency in wonderful hands. Dr. John Holloway, Dr. Ahmed Faheem and Dr. Doug McKinney will do a great job. Of that, I am quite sure.

The physicians on the Council and Rose Romero and all of our Alliance leaders are also doing a terrific job. I want to take this opportunity to thank all of them for their hard work this year. It has been a distinct honor and a privilege to serve with you and I am truly grateful.

Even though my presidential year is ending, I'm not ready to ride into the sunset just yet. In my next role as Council chairman, I will also be serving as its representative on the WESPAC board. It is critical that WESPAC contributions continue to increase. Like it or not, the legislative and, increasingly, the judicial branches of government are slowly taking control over how we practice medicine and how we take care of our patients. Unfortunately, many physicians are sitting on the sidelines watching it happen!

I would love to get every physician in the state back in the ballgame. I've learned a lot about how our government really works this past year, and it really is a game in a lot of ways, just on a much different playing field. We must start wielding more political force or we are going to get steamrolled. But, you know what? Playing the game really isn't that hard - - you just have to do it.

If the medical community would fund WESPAC like it should and pay attention to what happens with our legislators on a year-round basis, we could run the whole show. I know we could do a much better job than the lawsuit lawyers who are currently calling so many of the shots in our state.

Well, with these thoughts in mind I look forward to seeing as many of you as possible at our Healthcare Summit 2000 meeting at The Greenbrier. Thanks to all!

Phillip R. Stevens, M.D.

# Editorial

## "Be not the first by whom the new is tried nor the last to lay the old aside"

This is an old Scottish proverb which was quoted to me by a colorful Scottish otolaryngologist I had the pleasure of working with early in my career. It is advice which has served me well. I quote it now because of a disturbing new trend in the marketing of medical devices.

A few years ago while on vacation, I had the rare opportunity to watch one of the major network morning news programs. It just happened that they were airing a segment on a new way to treat otitis media. Being an otolaryngologist, I viewed with interest as they presented this "new technology."

As I watched, a very slick presentation unfolded. They described a new device with which the doctor could painlessly create a temporary hole in a child's eardrum in his/her office in a few minutes. News to me I thought.

I read my specialty journals and attend my specialty meetings on a regular basis. Somehow this marvelous technology had escaped by notice. Later that day, I called some colleagues and my national specialty organization. Surprise surprise - - no one else had ever heard of this "new technology" either.

About 10 days later, I received a promotional packet which in glowing detail explained that I too could offer this latest treatment for otitis media in my office. Yes, for the paltry sum of $60,000 I could purchase one of these miracle machines.

This device had been marketed to the public over a major information outlet watched by millions of people before it was introduced to the profession. Obviously, there had been no prospective clinical trials.

The manufacturer then placed some of their machines in major university centers so that trials could be done. I recently spoke with a brutally honest colleague who had the opportunity to use one of them. He told me that if you could make the eardrum numb and the child will hold still that it was possible to do this. He went on to explain that when the laser hits the ear drum it creates an audible pop and a puff of smoke.

Now, numbing the eardrum of a toddler is no mean feat. The point is that if I can numb the eardrum and the child will hold still, I can perform a myringotomy with a steel blade costing a few dollars and place a short duration ventilation tube in the patient's ear costing a few dollars more and achieve a superior result.

A few months later, a new device for the treatment of snoring was "introduced" on the same program. A short time later I was given the "opportunity" to purchase one of these for $30,000 and a similar scenario unfolded. My brutally honest friend also received one of these, so when one of the hospitals where I worked considered buying one, I gave him a call.

He explained that yes, this device did work, but that it took six to seven treatments not the one to two touted by the manufacturer. Insurance companies regard snoring as a social problem not a medical one. Patients must pay cash for these procedures. The fee recommended by the manufacturer is $1,800 per treatment. A good set of sound attenuating ear plugs can be had for less than $2. How do you want to spend your money?

A few weeks ago, a new way to take care of tonsils was introduced to the public in a similiar fashion. I didn't see the presentation, but a few days later I received my now expected packet of opportunity. Time will tell.

The marketing of medical devices and treatment in this fashion, as well as prescription drug advertising on the electronic media, is a disturbing trend. I don't see any way of stopping it. We must be ever vigilant and perhaps we can educate those who control the media that they must take some responsibility for what they air.

F. Thomas Sporck, M.D., F.A.C.S.

# AMA Delegation Report

The WVSMA delegation to the AMA's 2000 Annual Meeting in Chicago, June 9-15, consisted of Delegates Constantino Amores, M.D., James Helsley, M.D., and John Holloway, M.D., and Alternate Delegates Alva Deardorff, M.D., James Comerci, M.D., and Joseph Selby, M.D., who also served as a delegate to the Young Physicians' Section with Dorian J. Williams, M.D. Other members of the delegation included WVSMA President Phillip Stevens, M.D.; WVSMA Vice President Ahmed Faheem; American College of Radiology Delegate Ronald Cordell, M.D.; WVSMA Executive Director Evan Jenkins, and Marshall University medical students Hadassah Frye and James Campbell as the delegate and alternate delegate to the AMA's Medical Student Section. Some of the meeting highlights included:

- The issue of abortion rights was presented in Resolution 218. During the Reference Comittee testimony, the Chicago Archbishop Francis Cardinal George voiced his opposition to this resolution. The action proposed by the Resolution Committee was to have the AMA stand behind its enforcement of existing law in regards to reproductive health services and to reaffirm AMA policy that physicians shall not be compelled to perform any act in violation of personally held moral principles. This issue generated considerable media attention.

- There was also much discussion regarding the Medicare physician fee schedule transition. The AMA called on Congress to use current budget surplus funding to allocate more money to the Medicare fee schedule payments. This issue had the potential of creating a division between subspecialty medicine and primary care medicine. The reference committee and subsequently the House of Delegates approved a compromise on this issue.

- The House of Delegates approved CME Report 4, which called for a ban on AMA registration of accredited CME sponsors. This basically ends the issue.

- The House adopted a policy that the AMA's appointment of a physician to the ECFMG shall mandatorily be an international medical graduate. Up to now, this has not been the case. There was extensive debate in favor of this matter from international medical graduates who have felt disenfranchised from the ECFMG process.

- Extensive discussion took place on the Campbell Bill or the Physician Anti-trust Bill, which would give physicians the right to collectively negotiate with third parties in managed care issues. This bill is currently stalled in Congress and the AMA continues to work to "cut a deal" to get this issue passed, but there is considerable opposition from the Republicans in the Senate. There is also strong opposition from the Republican majority regarding the Patient Protection Act. Both Senators Rockefeller and Byrd have supported this legislation.

- Oregon physicians reported that their state Supreme Court recently ruled that the $500,000 non-economic damages cap was unconstitutional. A ballot initiative to reinstate the cap was defeated by the trial bar.

- It was reported that the District of Columbia joined Texas as the first two entities to pass rights doctrine authorizing collective bargaining negotiations.

- Dr. Randolph Smoak of South Carolina was inaugurated as the new AMA president. Dr. Smoak has been a very influential physician in the AMA and carries extensive credentials for the job of president.

- Dr. Nancy Neilsen of Buffalo, N.Y., was elected vice-speaker of the AMA House of Delegates. This was the most significant election held during the meeting. Dr. Neilsen is a native of Elkins and returns to West Virginia frequently to visit her mother who still lives in the Elkins area.

- Terri Marichiori, the AMA's new field representative for West Virginia, met with the our delegation during the meeting. She offered her assistance to any AMA members in West Virginia.

Respectfully submitted,

Constantino Y. Amores, M.D., Delegation Chair
James D. Helsley, M.D., Delegation Vice-Chair

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# WVSMA historical monument in Rivesville restored; replica placed at WVSMA office

**NANCY L. HILL**
*Managing Editor, West Virginia Medical Journal*

To preserve the memory of Dr. James Edmund Reeves and the 32 other visionary physicians who in 1867 founded the Medical Society of West Virginia, the organization which we today proudly refer to as the West Virginia State Medical Association, the monument in Rivesville that honors these individuals and this historic event has been restored and a replica of it has been placed at the entrance to the WVSMA office in Charleston.

Even though many discussions have taken place at WVSMA meetings over the years about the need to refurbish the monument or move it to another location, it wasn't until recently that words became actions thanks to WVSMA Past President Dr. Bill Atkinson, WVSMA Speaker of the House Dr. Douglas McKinney, Rivesville Mayor Joseph Haldeman and the Town Council and citizens of Rivesville. Now, with these two special endeavors complete, it is important to reflect upon the historical events that led up to them and pay tribute to Dr. Reeves - - the man who was instrumental in creating our association.

Dr. Reeves was born on April 5, 1829, in Amissville, Rappahannock County, Va., the son of the Reverend Josiah and Nancy Mosee (Kemper) Reeves and the grandson of Thomas Washington Reeves (1). His early years were spent in helping his father, who was also a tailor, and he was forced to leave school at age 14.

**Dr. James Edmund Reeves**

Through extra work, he earned money for books and at age 19 he began studying medicine with Dr. Elam D. Talbott in Philippi, Va. One year later, he became the pupil of Dr. Jacob Neff at New Market, Va., where he was given a great deal of practical study and even cared for patients.

After six months, Dr. Reeves had enough money to attend Hampden-Sydney Medical College in Richmond. He took a second course of medical lectures at the University of Pennsylvania and graduated in 1860 (1). Soon afterwards, Dr. Reeves established a practice in Rivesville for a few months while looking for a suitable property to purchase in Fairmont (1,2). His Fairmont home was on Jackson Street, near where St. Peter's Catholic Church is now located (2).

**WVSMA Speaker of the House Dr. Douglas McKinney *(left)* and WVSMA Past President Dr. Bill Atkinson *(right)* visited with Rivesville Mayor Joseph Haldeman on June 22 and had their pictures taken at the newly restored monument.**

While practicing in this area, Dr. Reeves, at age 38, realized the advantages of gathering his colleagues *"As a means of elevating the standard of Practical Medicine and Surgery in West Virginia — and to render quackery odious, . . ."* (1,3,4). (Unorthodox physicians and peddlers of "cure-all medicinals had plagued the region.) Dr. Reeves issued an Official Call for a meeting to be conducted on April 10, 1867, in Fairmont at the Methodist Protestant Church to organize a *"State Medical Society."* Fifteen other physicians signed the Call, which is recreated at right (1,4).

# Official Call

## Those Receiving This Circular Will Please Consider It as a Personal Invitation to Attend the Proposed Convention, and Participate in Its Deliberations.

## . . . To the Medical Profession in West Virginia . . .

Gentlemen:

As a means of elevating the standard of Practical Medicine and Surgery in West Virginia — and to render quackery odious, as it deserves, the want of State Medical Organization is severely felt by all true cultivators of our noble science within the limits of the State.

In West Virginia, the profession is, at many points, adorned by one or more active, intelligent members, who, by their industry and devotion to science, have made for themselves a name outside of their fields of labor; and there are others, too, of modest talent, scattered here and there, who but require the contact and association which a proper organization would so surely effect, to develop latent powers and capabilities of great credit to themselves, individually, and beneficial, in the highest degree, to their patients and the commonwealth of medicine.

There is much labor to be performed by the profession in West Virginia before it can reach the standard of respectability, which is its legitimate inheritance in some of the sister States. Disease and death do not relax their hold in favor of our mountains and valleys. On the contrary, some of these are the very strongholds of the enemy; and before his ravages can be stayed, the inhabitants must be taught the laws of Hygiene, and be able to mark the difference existing between the true and false — the intelligent physician and the murderous pretender, who is everywhere present with the offer of his ignoble service. These important lessons none but competent medical men can teach; and it is high time they should begin the noble work of giving life and health to the people, and respectability to themselves.

Organization would necessitate interchange of opinions on subjects connected with the different branches of the profession, and, besides the profit and pleasure of regular communications, habits of closer study and more patient investigation would be encouraged; the demand for classic and periodical literature largely increased — and these would be the signs of our improved status.

To accomplish all these excellent ends, it is proposed to organize a State Medical Society; and in order to formally initiate this movement, the undersigned have, upon consultation, agreed to issue this call for a convention, to assemble in Fairmont on the 10th day of April next. The call is urged upon all members of the regular profession, and their presence in the proposed convention is earnestly solicited. A full attendance is desired, not only on account of the interest connected with the organization of the State Society, but also because the American Medical Association will meet in Cincinnati early in May, and the profession of this State should be represented in it, in accordance with the expressed desire of the Association.

John Frissell, *Wheeling*
J. W. Ramsey, *Clarksburg*
J. M. Blackford, *Clarksburg*
J. M. Bowcock, *Clarksburg*
Jas. E. Reeves, *Fairmont*
D. S. Pinnell, *Buckhannon*
G. A. Cracraft, *Triadelphia*
J. H. Storer, *Triadelphia*
Thomas Kennedy, *Grafton*
H. W. Brock, *Morgantown*
J. C. Hupp, *Wheeling*
E. A. Hildreth, *Wheeling*
R. H. Cummins, *Wheeling*
W. J. Bates, *Wheeling*
A. S. Todd, *Wheeling*
James Cummins, *Wheeling*

February 28, 1867

The Medical Society of West Virginia was formed at this meeting, which was called to order by Dr. H. W. Brock of Morgantown (4). On Dr. Brock's motion, Dr. W. J. Bates of Wheeling was selected as temporary president, and Dr. J. W. Ramsey of Clarksburg as secretary. Dr. Reeves, chaired the Committee of Arrangements, and presented the welcoming address. Following his speech, Dr. Reeves, read a letter from L. M. Cole, Esq., general ticket agent of the B & O Railroad Co., which he had written by the authority of John W. Garrett, president of the company. Mr. Cole stated that Mr. Garrett had authorized free train faires home from the Fairmont convention for all the participants because he had so much respect for the profession of medicine and the objectives of the meeting.

Next, communications from Drs. Elias S. Bronson of Buckhannon, and M. C. Dougherty and Thomas Kennedy of Grafton, were read by Dr. Reeves and several business issues were discussed. A committee was formed to write a Constitution and Bylaws and Dr. Reeves was one of the seven members appointed to serve on it. These members were excused, and after several hours they returned with this document, which was unanimously adopted (4).

That evening, the Committee on Nominations announced their selection of officers for the Society. Dr. Reeves had been elected to serve as secretary and the other officers chosen were: Dr. John Frissell of Wheeling, president; Dr. Jesse Flowers of Mannington, first vice president; Dr. H. N. Mackey of Morgantown, second vice president; Dr. J. M. Lazzelle of Fairmont, third vice president; and Dr. John C. Hupp as treasurer. The physicians selected to serve on the Committee on Publications were listed as Dr. J. H. Brownfield of Fairmont; Dr. Henry J. Weisel of Wheeling; and Dr. F. C. Shepherd of Bruceton. In addition, three physicians, Drs. H. W. Brock, M. Campbell, and J. W. Ramsey, were elected delegates to the 18th Annual Meeting of the American Medical Association which was to be held in Cincinnati on May 7.

The next meeting of the Medical Society of West Virginia took place on October 2 and 3, 1867, in Wheeling. At this meeting, a letter was read by Dr. Hupp, who served as chairman of the Committee of Arrangements, from Dr. William B. Atkinson of Philadelphia, permanent secretary of the AMA, congratulating the profession of West Virginia on their successful organization. In other business that first day, a resolution was made that a committee of three be appointed to report on the expediency of petitioning the Legislature to enact a law for the compulsory registration of births, deaths and marriages. Dr. Reeves moved that an amendment be added that the petition also ask the law to include compulsory vaccination. This amendment was agreed to and the resolution was adopted as amended.

Governor Boreman and Mayor Sweeney of Wheeling opened the evening session with welcoming remarks, but the governor was so ill that he was only able to appear briefly. He stated he could not give his speech, but he wanted to return his thanks for the invitation he had received from the president of the Society, and express how pleased he was knowing that there was an organization of this type in the state. He remarked that it was only because of his respect for the Society and its objectives that he was able to be present due to his ill health.

After the governor and the mayor excused themselves, several scientific papers were presented, including one by Dr. Reeves in which he reported on a patient he had cared for who had *"Expectoration of Brochial Casts."* This case had been published in the *Proceedings of the Pathological Society of Philadelphia.* Later that evening, Dr. Reeves participated in a discussion on diptheria and described three patients he had cared for with fatal cutaneous diptheria.

During the proceedings the next day, there was extensive dialogue on the procedures surrounding how members were being admitted to the Society. Since the meeting in Fairmont, membership had doubled. Dr. Reeves explained that at the Fairmont meeting, 21 physicians had responded to the Call for the purpose of organizing the Society. After the adjournment, Dr. Bates suggested the names of Drs. Cummins, Baird, and others, who were not present, and were, therefore, not members *de facto*, but, as he maintained, were members *de jure*. Thus, there was an understanding that the same privilege which Dr. Bates wished extended to the Wheeling profession, should be extended to the profession throughout the state. Therefore, Dr. Reeves said he had addressed a letter to those who had been sent the circular, informing them that their certificate of membership would be forwarded on the receipt of their admission fee.

Dr. Reeves went on to explain that 25 or 30 physicians had responded. In doing this, he had acted solely "to promote the welfare of the Society, for it had engaged his whole heart and feeling; and it was the proudest reflection of his life that he had something to do with organizing it (4)." After speaking on this subject, the members agreed to forward certificates of membership to the physicians who had received the circular.

The meeting was adjourned until 6:30 p.m., and when it reconvened, Dr. Reeves, who had a particular interest in pathology, placed on exhibit a cystic mammary tumor or colloid cancer, which he and and Dr. Stidger had removed from a 49-year-old patient. This woman's tumor weighed six and half pounds and Dr. Reeves described her case in detail. He then proceeded to make the following motion:

*"Whereas, The study of Microscopy has become absolutely essential to a correct understanding of Pathology, and the proper appreciation of disease; and that all attempts to cultivate this science should receive the encouragement of medical men; therefore,*

*Resolved, That we welcome the assistance tendered by Messrs. Allen and Bocking, of the city of Wheeling, in the study of Microscopy, and we heartily commend them to the attention of the profession of the State* (4).

Dr. Todd then made a motion that Dr. Allen be requested to submit, at the Society's next meeting, a paper on the use and importance of the microscope to the medical profession. Immediately following, President Frissell announced that the City Railway Cars should be arriving soon to take members to the fair on Wheeling Island, a special afternon excursion, so the society adjourned until 6:30 p.m.

That evening, committees on climatology and epidemic diseases, medical necrology and medical botany were formed and a resolution was offered thanking the officers of the Society and the officers of the Fairmont convention for

satisfactory discharge of their duties. Responding to this compliment on behalf of the officers, Dr. Reeves delivered an eloquent speech in which he stated:

*"The Medical Society of West Virginia is now one of the permanent institutions of the State, and must wield an influence in the highest degree beneficial upon the profession and the public at large. Already, the fruits of organization are most encouraging. Our membership now numbers over 60 names, among which are to be found a majority of the best men in the State; and the number will continue to enlarge, until every man claiming respectability in the profession in the State, will be included. An enlightened public sentiment will command him to this forum, where his talents will receive a just premium, and from whence his honors, if he possess them, will shine all the more brightly.*

*"Gentlemen, the future of the Medical Society of West Virginia is full of rich promise; and the present harmonious and profitable meeting will be but the beginning of even better things in store for us, if we continue to discharge our duty faithfully; if we remain true to ourselves and to the profession whose keeping is in our own hands. I know you will guard well its fair escutcheon. I know you will work earnestly to uphold its honor"(4).*

Shortly after this meeting, Dr. Reeves moved to Wheeling, where he practiced for 20 years. During his years in Wheeling, Dr. Reeves established a health department by city ordinance and was health officer and county physician. In 1881, he was elected president of the Medical Society of West Virginia and he also was one of the founders of the American Public Health Association, serving as its president in 1885. Besides his public health work, Dr. Reeves' interest in microscopical investigations led him to revise several microscopical appliances and he published a book entitled *"A Handbook of Microscopy* (1)."

Dr. Reeves lived the last eight years of his life in Chattanooga, Tenn., where he died on Jan. 4, 1896, from cancer of the liver. The diagnosis of his illness was made by the eminent Dr. Osler in Baltimore, and from that time until his death Dr. Reeves was attended by many of his colleagues.

Dr. Reeves was married three times — first in 1851, to Miss Lydia Martz of Rockingham County, Va. To them were born were two sons and two daughters. His second wife was Miss Mary V. Frey, of Allegheny County, Md., and the third was Miss Frances M. Starrett of Cumberland, Md., who survived him.

This quotation from the Chattanooga newspaper at the time of his death shows by what esteem he was held, not only in that city, but by the members of his profession everywhere:

*"Dr. Reeves was an authority of national reputation in microscopy." His skill in diagnostics aided by the microscope, was acknowledged by the very highest medical authorities. His late work, 'A Handbook of Microscopy,' had been a success from the day of its publication, and his numerous writings on medical subjects stand at the front in the literature of the profession"* (1).

Back in West Virginia, membership in The Medical Society of West Virginia had continued to grow, and in 1902, its name was officially changed to the West Virginia State Medical Association (3). In the 1930s, the WVSMA

**WVSMA Speaker of the House Dr. Douglas McKinney proudly inspects the replica of the bronze tablet on the monument in Rivesville which has been placed at the outside of the entrance to the WVSMA office in Charleston.**

decided to honor the founding members and appointed the following committee to draw up plans for a suitable memorial: Dr. T. M. Hood of Clarksburg; Dr. C. O. Henry of Fairmont; Dr. Robert J. Reed, Sr., of Wheeling; Dr. T. M. Barber of Charleston; and Dr. Walter E. Vest of Huntington (1).

After considerable investigation, Rivesville, the town where Dr. Reeves first practiced, was chosen for the site of the monument. A suitable boulder weighing over 10 tons was finally found in Canaan Valley in Tucker County. The State Road Commission moved it to its present site on Main Street in Rivesville, on land which was donated by the town. A bronze tablet bearing the names of the founders was added and Marion County Medical Society Auxiliary landscaped the monument grounds. In conjunction with a meeting of the WVSMA and the WVSMA Auxiliary which was held in Fairmont, the monument was officially dedicated on June 9, 1936 at 4 p.m. (1).

On the face of the bronze tablet, the founders names were listed along with their respective towns. Dr. Reeves' name was centered at the top with the spelling of his city given as Reevesville, as if it were named after him. However, according to West Virginia historian Dr. Roy Bird Cook in his article *"How Rivesville Got Its Name"* which appeared in the Fairmont Times on March 22, 1936, and was quoted in the book *Now and Long Ago; A History of the Marion County Area* by Glenn D. Lough (2), the town was always spelled as Rivesville and it was not named for Dr. Reeves. He wrote:

*"In connection with questions raised relative to the town of Rivesville, and the belief by some that the name has some connection with Dr. James E. Reeves, I am led to make some observations in an attempt to clarify this situation. It must be understood, however, that this is done free from any desire to*

*encourage any discussion and my remarks in no way bind the Highway Marker Commission which has had the matter up for consideration. It has only to do with a desire to secure historical accuracy.*

*"The need for postal service below present Fairmont by 1835 led to the movement by which a post office was established as Rivesville, on Feb. 25, 1837. It would seem reasonable to suppose that the village at that point was so called even prior to that date, at least for a short time.*

*"Elisha Snodgrass was named the first postmaster. The community continued to grow, and the Virginia assembly of 1853-54 provided for a new road to be built from this point to the Pennsylvania line, to be called the Rivesville and New Brownsville road. The spelling in all cases is very clearly given as Rivesville.*

*"Later writers have given several confusing accounts of the origin of the name. One writer even insisting that it was named for Gov. Henry C. Rives of Virginia, a non-existent person. Another that it was named for Francis Reeves, actually having in mind, it seems, Francis Everard Rives, a member of Congress from Virginia in 1837-39, born in Prince George County, and a native of Petersburg. Lately, it has been much confused by connecting it with Dr. James Reeves.*

*"The period of establishment falls in a cross section of the Virginia administrations of Governor Robertson and Governor Campbell. Both men, it seems, were friends of Joseph Johnson, of Bridgeport, Harrison County, who was then in Congress. Johnson, no doubt in his services at Richmond in the Virginia Assembly and in the national Congress, was a warm supporter of William Cabell Rives, for many years a Virginian of great national prominence. Inasmuch as Johnson had the office established, it is reasonably clear it was named for the last named Rives. Rives followed the able John Tyler in the Senate, and therefore, in both Virginia and in the Congress, was a contemporary of Johnson* (2)."

Over the years since the monument was dedicated in 1936, it fell into disrepair. Dr. Bill Atkinson, who served as president of the WVSMA from 1988-89, discovered this fact when he visited the site in the spring of 1988.

"I became interested in the monument and the early leaders of the WVSMA after reading the book, *"The Founders of the Medical Society of West Virginia"* (1) which I had discovered at the WVSMA office," Dr. Atkinson said. "I decided to stop and see the monument on my way home from a meeting in Morgantown in the spring before I became president. I was shocked and saddened because there were weeds and litter around it and the monument was very run down. I talked with the gentleman who was the mayor then about having it moved to Fairmont, the site of the first meeting, or to Charleston, and I also took pictures.

"The members of the Executive Committee and Council agreed that something should be done when I told them about the monument and showed the photos, but they didn't take any actions so I continued to bring up the issue at meetings. I was elated when I introduced a resolution and it was passed last year at the Annual Meeting explaining the monument's historical significance, its poor condition, and the need to investigate moving it to another location."

Shortly after the Annual Meeting, WVSMA Speaker of the House Dr. Douglas McKinney decided to champion the cause and visit Rivesville since he lived nearby in Bridgeport. After seeing for himself just how bad the condition of the monument was, Dr. McKinney also took pictures and went in to see the town's new mayor, Joseph Haldeman.

"Mayor Haldeman was very receptive to me and he suggested that I go before City Council to discuss the issue, so I returned to Rivesville in early October and addressed the members of the Town Council," Dr. McKinney explained. "I then wrote the mayor a letter telling him that whether they decided to relinquish the monument or not, I hoped that my visit had helped stir up some interest in maintaining it and making it look good.

"The mayor contacted me and let me know that the Town Council had decided they wanted to keep the monument in Rivesville and had agreed to maintain it. I then asked that I be allowed to remove the bronze tablet from the monument, have it refurbished and have a copy made for the WVSMA office in Charleston. They agreed to my plan, so I obtained estimates and then met with the WVSMA Executive Committee and Council in November. They approved this project and the bronze plaque was removed by J. D. Signs of Fairmont in December, who then created a new cast of it and replaced it on the monument in March.

After the plaque had been returned, Mayor Haldeman wrote a letter to Dr. McKinney which said:

*"On behalf of the Town Council of Rivesville and the people of the Town of Rivesville, I want to thank you for returning the plaque to the monument of the founding of the West Virginia State Medical Association. The refurbishing job is beautiful, and the monument is now a bright and shining spot in the middle of town on Main St.*

*"The Town is planning to reposition the loose stones, clean up the site, and place flower boxes in front and on each side of the monument. This will greatly improve the site, and make it a treasure for the people of the Town and surrounding areas.*

*"Again, thank you for your interest in the monument, and for returning the plaque in better condition than ever before."*

On April 7, the other new copy of the plaque was installed at the WVSMA office, and in early June all of the beautification efforts around the monument in Rivesville had been completed. Dr. Atkinson and Dr. McKinney visited Rivesville on June 22 and they were very pleased with the all the work that had taken place to bring the monument and the site back to life. They take pride in the fact that this monument is once again a credit to the WVSMA and the town of Rivesville.

## References


1. **The Founders of the Medical Society of West Virginia. The Auxiliary to the West Virginia State Medical Association. Charleston, April 1936.**
2. **Glenn D. Lough. Now and Long Ago; A History of the Marion County Area. Morgantown Print and Binding Company. Morgantown, 1969.**
3. **Alice Jo Hess. History of Medicine in Harrison County West Virginia. Harrison County Medical Society. McClain Printing Company, Parsons, 1978.**
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Special Report

# The impact of the WV Health Care Decisions Act

**ALVIN H. MOSS, M.D.**
*Director, Center for Health Ethics and Law, West Virginia University, Morgantown*

**GIL DELAURA, M.H.A., J.D.**
*Charleston*

***Editor's Note: This article is a first of a series on the subject of end-of-life care in West Virginia. Nothing in this article is intended to constitute legal advice. Individuals with questions about the new legislation or related matters are urged to consult their own attorney.***

During its 2000 session, the West Virginia Legislature passed the West Virginia Health Care Decisions Act. This act just became effective on June 10 and it repeals the Natural Death Act, the Medical Power of Attorney Act, and the Health Care Surrogate Act. It contains numerous changes to improve end-of-life care in West Virginia and it provides new, easier-to-use Living Will and Medical Power of Attorney forms.

Physicians need to be aware of these changes to care for patients who lack decision-making capacity, to counsel patients about advance directives, and to avoid possible disciplinary action by the West Virginia Board of Medicine for failing to honor advance directives. This article briefly describes some of the key points of this new legislation.

## Need for two physicians eliminated

To activate a Living Will under this new law, only one physician is required to certify that a patient lacks decision-making capacity and is in a persistent vegetative state or terminally ill. In addition, to activate a Medical Power of Attorney or to begin the selection process for a health care surrogate for medical decision making *(psychiatric mental illness is described later)*, now only one physician is required to determine that a patient lacks decision-making capacity *(licensed psychologists or advanced practice nurses in collaboration with physicians may also determine incapacity)*.

The decrease in the number of physicians necessary to declare advance directives in effect is consistent with the Model Uniform Health Care Decisions Act developed by the National Conference of Commissioners on Uniform State Laws in 1993. The former requirement to have two physicians to activate an advance directive was burdensome, especially in rural settings and in emergency departments where two physicians may not be present at the same time.

## User-friendly language

The language in the Living Will and Medical Power of Attorney forms has been modified to make it more user-friendly. Underneath the title of the Living Will form is a statement explaining its purpose – *"The kind of medical treatment I want and don't want if I have a terminal condition or am in a persistent vegetative state."* Underneath the title of the Medical Power of Attorney form is a statement of its purpose in lay language – *"The person I want to make health care decisions for me when I can't make them for myself."*

Both the Living Will and Medical Power of Attorney forms now have a Special Directives or Limitations section that invites specific comments about tube feedings, breathing machines, cardiopulmonary resuscitation and dialysis. On the old forms, most patients wrote no comments in this section. In addition, the confusing wording on the previous Medical Power of Attorney form that required two physicians to certify that there was *"no medical hope of benefit"* has been eliminated. This language was subject to different interpretations by attorneys and restricted the usefulness of the Medical Power of Attorney form in situations where the withholding or withdrawal of life-sustaining treatment was being considered.

## Conflict resolution

Physicians sometimes find themselves in the situation in which the patient's Medical Power of Attorney representative or health care surrogate is requesting treatments or procedures that the physician knows to be in conflict with the patient's wishes. In this circumstance, the law specifies that the physician shall follow the patient's wishes. The law also specifies that if the patient has two advance directives that are in conflict, the one most recently completed takes prcedence only to the extent needed to resolve the conflict.

If the patient's wishes are unknown and the Medical Power of Attorney representative or health care surrogate is asking for something that in the physician's opinion is contrary to the patient's best interests, the law specifies that the attending physician *"shall attempt to resolve the conflict by consultation with a qualified physician, an ethics committee, or by some other means."*

## Patient request contrary to advance directive

If a patient who has been previously evaluated to be incapacited makes a request contrary to his/her previously completed advance directive, two physicians or one physician and one psychologist must certify that the patient

has regained decision-making capacity in order for the patient's current request to be followed. This requirement is intended to keep a patient's advance directive from being easily overruled by a physician who does not agree with it.

For example, if a physician wants to insert a feeding tube into a patient who had completed a Living Will indicating that he/she never wanted to have a feeding tube, another physician or psychologist is required to certify that the patient has regained the capacity to make an informed decision for feeding tube insertion before the patient's advance directive can be declared no longer in effect.

## Psychiatric mental illness

There was confusion among attorneys and health care professionals regarding the application of the West Virginia Health Care Surrogate Act of 1993 to the treatment of patients with psychiatric mental illness. This new act may be used for patients who are incapacitated with psychiatric mental illness.

Under the new act, patients with psychiatric mental illness, mental retardation, or addiction who have been determined by their attending physician or a consulting physician to be incapacitated must be examined by a second physician or qualified psychologist and determined to be incapacitated before the attending physician is authorized to select a health care surrogate. The requirement for a second opinion about incapacity before selection of a health care surrogate for patients with psychiatric mental illness does not apply in those instances in which the treatment to be rendered is for a medical condition, not mental illness.

## Counseling patients about the new forms

Physicians may wonder if they should encourage their patients to complete the new Living Will and Medical Power of Attorney forms if their patients have already completed the forms under the old statutes. These new forms provide three advantages to patients: only one physician is necessary to activate the Living Will or Medical Power of Attorney *(this provision may be especially helpful in circumstances in which only one physician is available)*; the new forms suggest specific helpful comments that patients might make to guide health care decision making for them when they have lost capacity; and the confusing language on the Medical Power of Attorney form that was subject to differing interpretations by different lawyers has now been eliminated. Under the new law, patients can also use a combined Medical Power of Attorney - Living Will form if the combined form reflects their values and wishes. Patients also have the option of using other forms such as *"Five Wishes"* as long as they are witnessed and notarized according to West Virginia law.

## Penalties for not honoring advance directives

**It is extremely important for physicians to know that this new law includes liability for doctors who fail to act in accordance with the known directives in a patient's Living Will or Medical Power of Attorney or the decisions of the patient's Medical Power of Attorney representative or health care surrogate.**

For there to be liability for the physician, the physician must have actual knowledge of the advance directive. In other words, the physician must have been informed of the existence of the patient's Living Will or Medical Power of Attorney. When the physician has actual knowledge of the patient's directive and the directive is clear but he/she fails to act in accordance with it, then the physician may be subject to disciplinary action by the West Virginia Board of Medicine.

It is important to note that the new law contains a conscientious objection section that allows the physician to transfer the care of the patient if the patient's directive is contrary to *"the individual provider's sincerely held religious beliefs or sincerely held moral convictions."* Under the law, the physician must inform the Medical Power of Attorney representative or the health care surrogate of his/her refusal to honor the patient's directive. Transferring the care of the patient to another physician under these circumstances does not constitute abandonment.

## Additional provisions

There are additional provisions in this law which cover the completion of advance directives by mature minors, the authority of the Medical Power of Attorney representative or health care surrogate to consent to autopsy and funeral or cremation arrangements, and the continuity of the incapacitated patient's decision maker when the patient is transferred from one health care setting to another.

The new law and the new advance directive forms can be accessed via the Internet at the website of the West Virginia Initiative to Improve End-of-Life Care which is found at www.wvinitiative.org. The Living Will, Medical Power of Attorney and the combined Medical Power of Attorney-Living Will forms may be downloaded and printed from this website. After the law becomes effective, the West Virginia Bureau of Senior Services will also be mailing advance directive forms to individuals who request them.

If you have questions about the new law, physicians may call their attorneys or the West Virginia Initiative to Improve End-of-Life Care toll free at 877-209-8086.

Special Article

# Protecting patients' rights: Responding to third-party requests for mental health records

***DAVID K. HIGGINS, ESQUIRE***

***CHARLES M. JOHNSON, ESQUIRE***

***DAVID R. BUNGARD, ESQUIRE***

*Robinson & McElwee, LLP, Charleston*

Health care providers routinely receive written requests from third parties for their patients' medical files for use in various civil litigation or administrative matters. Particular care and attention needs to be made to these requests from attorneys, state agencies or licensing boards when they are seeking information concerning a patient's psychological and/or mental health status. A provider who mistakenly releases a patient's records which contains this confidential information to a third-party without an authorized written release or under one of the statutory exceptions is unnecessarily exposing himself to liability for the unauthorized disclosure.

Physicians who are not psychiatrists or behavioral health care providers per se should exercise caution when rendering advice and services regarding mental health issues. It is critical to be aware of the relevant statutes which set forth the procedures for the disclosure of mental health records.

## Restraints on voluntary disclosure

There are four statutes set forth in the West Virginia Code which place restrictions upon the disclosure of a patient's file regarding services rendered by psychologists, psychiatrists, social workers, licensed professional counselors or other mental health providers.

W.Va. Code §16-29-1(a) limits disclosure to patients receiving care for psychological or psychiatric problems to a summary being provided to the patient or the patient's representative. W.Va. Code §27-3-1(a) designates all information obtained by a professional during the course of treatment or evaluation of a patient's mental or emotional condition as being "confidential information." These types of records would include any documents which reflect information provided by the patient or the patient's family or friends concerning the patient's mental or emotional state, any diagnoses or treatment plans made by the provider, and any advice rendered by the provider to the patient.

Licensed social workers and professional counselors are further prohibited under two separate statutes from communicating any confidential information acquired during their practice of consulting or counseling with their patients as stated in W.Va. Codes §§30-30-12, 30-31-13. The public policy considerations underlying these statutes are meant to strengthen the bond of trust between providers and patients during the treatment process and to protect the patient from any potential embarrassment which might be caused from the disclosure of information obtained during the course of consultation (1).

Futher ethical obligations imposed by professional associations also prevent the voluntary disclosure of confidential information. The State Board of Examiners of Psychologists has adopted the Code of Ethics of the American Psychological Association as part of its regulations. The American Association for Marriage and Family Therapy's (AAMFT) Code of Ethics also imposes restrictions on such counselors from disclosing client confidences.

## Consent situations

The simplest way for a provider to comply with these statutes and its professional ethical obligations to obtain a written release from the patient for the disclosure or his/her file. The release needs to be signed by the patient or his/her legal guardian and should distinctly identify the types of records which the patient has consented to being produced. Children under the age of 18 cannot authorize the disclosure of their files and authorization must first be obtained from their parents or designated legal guardians. If a patient is deceased, a release signed by the personal representative of the estate or a beneficiary of the patient's insurance policy is considered to be sufficient (2). Should the provider have any questions concerning the competency of his/her patient's consent, then the provider should treat the request for records in the manner outlined below in non-consent situations.

There are three important exceptions which permit a provider to release a patient's "confidential information" (3). The first is if a provider can disclose such information to the proper authorities in order to protect a patient from a "clear and substantial danger of imminent injury" to himself or to others. For example, if a patient reveals to a provider that he/she has suicidal thoughts or intends to commit a violent act against a family member, then the provider can disclose that information to the proper persons in order to prevent such acts from occurring.

The second exception notes that a patient has waived any privilege to the non-disclosure of confidential information when the patient files formal ethics charges against social workers and licensed professional counselors. The final exception provides for access to those involved in treatment on a "need to know basis" and also for the purposes of internal review of the quality of services.

## Non-consent situations

Quite often, a provider's first notice of a request for a patient's mental health records will come in the form of a civil subpoena drafted by an atttorney or an administrative subpoena issued on behalf of a state licensing board. The subpoena is generally not accompanied by any written release from the patient. At that point, it is crucial that the provider confirm with the patient whether the patient has executed any written releases which specifically authorizes the production of such materials. If no consent in the form of a written release has been obtained, a provider should not voluntarily produce any of the patient's mental health records pursuant to the subpoena until the provider has been ordered by a court to comply with the terms of the subpoena.

The proper procedure for a patient and/or the provider to object to the disclosure of "confidential information" is to file a Motion to Quash the subpoena with the court from which the subpoena was issued. For those subpoenas served by state agencies or licensing boards, the patient or the provider should initiate the proper proceeding in the local circuit court to address the matter. A patient will generally undertake this action if he/she does not want such materials to be disclosed, however, in certain situations, the provider may want to retain separate counsel to intervene on its behalf and have its concerns and objections noted on the record. This can occur in a situation where services have been provided to both the patient and other family members at the same time and the scope of the third party's request for information would emcompass confidential information obtained from others. During the course of joint counseling sessions, confidential information relating to members of the same family are often intertwined throughout the provider's records rendering it impossible for a provider to produce certain documents. A provider cannot rely upon the express release of one patient to disclose confidential information relating to a family member also being treated in group counseling whose information is contained within the same file.

Once the matter is brought to the circuit court's attention, the court has to make a finding that the patient's confidential information is sufficiently relevant to the proceeding before the court in order to outweigh the importance of maintaining the confidentiality recognized by statute. The court is entitled to review the provider's records in order to ascertain their relevancy to the proceedings. Any concerns which providers have about the production of such information to third parties should be addressed to the court in the form of a letter which accompanies the patient's file sent to the court. Most judges would rely heavily upon the provider's explanation of the content of the patient's file in order to make the necessary relevancy determination. Once a court has made a relevancy determination in regards to the third party's need for the information, a court can issue a written order requiring the provider to disclose the information.

It is common for a provider to be ordered to redact information from a patient's file which relates to non-relevant information concerning services rendered to a patient's family members. A provider who is ordered to disclose records pursuant to a court order has satisfied the confidentiality requirements of his/her professional and statutory obligations, provided that such disclosure is consistent with any requirements of the court order.

There are two other situations where confidential information can be disclosed and both involve court-ordered examinations. A provider who has been ordered to conduct a mental competency examination for purposes of involuntary confinement proceedings or for purposes of evaluating whether a person is competent to stand trial is required to provide their reports to the court. Once a court has reviewed the report and made the requisite relevancy determination, the provider can be ordered to provide copies of its report to the parties before the court.

## Conclusion

There are potential pitfalls which await health care providers who unknowingly fail to exercise the proper amount of caution in producing mental health files. Attorneys and administrative boards should be aware that requests for mental health files are routinely more complicated and subject to more restrictions concerning privileges than an normal medical records file. A lot of time and expense can be avoided if the requesting parties recognize the additional restraints and work together with the health care provider to tailor the request to meet all of the requirements of West Virginia law.

## References


1. **State v. Roy. 460 S.E. 2d 277, Syl.Pt. 2 (W.Va. 1995).**
2. **W.Va. Code §30-30-12(a)(1); §30-30-12(a)(2); §30-31-13(b).**
3. **W.Va. Code §27-03-01(b)(4); §30-30-12(a)(2); §30-31-13(b).**

# Avoid patient safety issues when utilizing reprocessed "single use" items

**Q. My colleagues and I are establishing office-based policies regarding reprocessed "single-use" items. Are there any current guidelines or regulations we can refer to and implement in the policies to reduce liability risks?**

A: This is a controversial issue in medicine today. Medical regulatory bodies have closely monitored single-use devices (SUDs) since their introduction in the late 1970s; however, regulations and guidelines have yet to be established. Until that happens, it is up to the health care facility or provider to make informed decisions regarding reprocessing. While the medical community awaits confirmation from on-going studies and case evaluations, warnings have been issued concerning patient safety and liability risks of re-using devices.

The Food and Drug Administration (FDA) recently produced a draft guidance revealing the agency's current thinking on reprocessed SUDs and the factors the agency is using to determine the levels to which patients are at risk. By dividing the reprocessed devices into three categories — high, medium and low — the FDA can continually monitor and issue new requirements as needed. Find the FDA draft guidance online at www:fda.gov/cdrh/reuse.

According to risk management experts, physicians should individually consider the safety and efficacy of items intended for single-use after reprocessing. Patient safety, as in any case, is the primary concern.

The Association of Operating Room Nurses (AORN) advises: "A single-use medical device that cannot be cleaned, sterilized or disinfected without damage to its integrity and/or function should not be reprocessed."

When the manufacturer has not provided written instructions for resterilizing or reprocessing SUDs, the organization must demonstrate and document patient safety, device effectiveness and integrity. AORN warns that in some instances "it may be extremely difficult, if not impossible, to document that a device can be reprocessed without residual toxicity and still function safely and effectively."

Physicians insured by Medical Assurance, the WVSMA's endorsed medical professional liability carrier, may contact the company's Risk Resource Center for prompt answers to liability questions and/or risk managment at (800) 282-6242 or e-mail at rmhelp@maih.com.

# *West Virginia damage cap in jeopardy*

A decision to overturn or uphold West Virginia's $1 million non-economic statutory cap is expected from the state Supreme Court in the fall of this year.

This issue gained steam from a case in which a jury returned a $2.82 million verdict to a plaintiff that was ultimately reduced to $1,021,000 after the cap was applied, and has become a delicate legal/political matter affecting the medical liability setting. Medical Assurance stresses it will continue to maintain its strong defense commitment in the face of any decisions concerning medical professional liability for all its insureds within the state.

For more information about Medical Assurance and its defense strategy, call (304) 346-8228 or (800) 331-6298.

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# Arrythmogenic right ventricular dysplasia: An uncommon cause of syncope in a young male

*JOHN MCKNIGHT, M.D.*

*DONALD LILLY, M.D.*

*PAULETTE WEHNER, M.D.*

*Department of Cardiovascular Services, The Joan C. Edwards School of Medicine at Marshall University, Huntington*

## Abstract

***Arrythmogenic right ventricular dysplasia (ARVD) is a relatively rare disease first described in 1977. It is characterized by replacement of the right ventricle (RV) by fat or fibrous tissue. Patients often present with symptomatic ventricular tachycardia (VT) and the risk of sudden death is approximately 2.5% per year. Physical exam is often unremarkable. To date, the best diagnostic test is the MRI, however, electrocardiographic and echocardiographic data are useful. Treatment can be with beta blockers if a medical approach is desired. Multiple surgical options are available. No long-term studies are available to guide therapy; thus each case should be dealt with on its merits. This article describes the case of a 41-year-old male who had been asymptomatic until he presented with syncope. An extensive work up was undertaken and ARVD was diagnosed by MRI.***

## Introduction

Arrythmogenic right ventricular dysplasia (ARVD) is a rare condition characterized by replacement of the right ventricle (RV) by fat or fibrous tissue. While the cause is unknown, an autosomal dominant pattern of inheritance is seen in up to one third of these cases.

Patients may present with syncope or sudden death secondary to ventricular tachycardia (VT) originating from the RV. The diagnosis can be made by endomyocardial biopsy, CT scan, echocardiogram or MRI.

Once diagnosed, medical treatment is with beta blockade. Surgical options include cryoablation of foci of VT or myomectomy. Implantable defibrillators are also an option in cases with documented VT.

This article describes a case of ARVD in a 41-year-old male who is a native West Virginian. He had been asymptomatic until he presented with syncope. An extensive work up was undertaken and ARVD was diagnosed by MRI.

VT could not be elicited by electrophysiologic studies and no syncopal episodes occurred during studies. He was given no definitive treatment during admission at his request and was discharged home in stable condition with an event recorder.

Follow-up was arranged. Should VT be recognized, treatment with beta blockade, myomectomy, cryoablation or implantable defibrillator will again be offered.

## Case report

A 41-year-old male with no significant past medical history experienced chest pressure after a Tae Kwon Do class that was thought to be musculoskeletal. The next day, the chest pain returned while he was sitting on a bed and he had a syncopal spell with no aura or palpitations. He lost consciousness for only a few minutes and no seizure activity was noted.

This patient was brought to the ER and admitted. He was awake, alert and in normal sinus rhythm. His vital signs revealed a heart rate of 68 and a BP of 109/71 mm.Hq. He was afebrile.

His exam was unremarkable. Chest X-ray showed no infiltrates. CBC was within normal limits, as were his chemistry panels. Thyroid function and Vitamin B12 level were also normal. The EKG showed normal sinus rhythm with early repolarization.

An EKG was done while he was in a standing position and it was similar to the baseline EKG, although it did show inverted T waves in the right precordial leads. A VQ scan was normal. MI was ruled out by serial CKMB isoenzymes. An exercise stress test was negative for ischemia. Tilt table was unremarkable.

He experienced no more chest pain while he was in the hospital. An echocardiogram showed normal left ventricular function with mild mitral regurgitation, severe tricuspid regurgitation, and dilation and hypokinesis of the right ventricle. Uhl's anomaly was considered at this point.

An EKG grated T1 weighted MRI was done using images without fat saturation. This revealed an abnormally high signal within the myocardium of the right ventricle extending into the atrio-ventricular groove, compatible with ARVD.

There were no arrhythmias during continual monitoring in the hospital. However, with the diagnosis of ARVD and syncope, electrophysiology testing

was undertaken. This revealed no inducible ventricular tachycardia.

This patient has no arrhythmias, no recurrence of chest pain, or no syncope during his admission. He was discharged on no medical therapy at his request. He was given an event monitor to wear for one-month. At discharge, he was stable and scheduled for routine follow-up.

## Discussion

This disease is characterized by replacement of right ventricle myocardium by fat or fibrous tissue (1)(Figures 1 and 2). The cause of the myocardial change is not known. Apototic cell death does occur in ARVD when compared to matched controls and probably contributes to cell loss (2).

In up to one third of patients, there seems to be an autosomal dominant pattern of inheritance (3-5). Variable expression is seen with the autosomal dominance (6-7), and there can be focal or generalized thinning of the RV. The entity appears to be different from Uhl's anomaly, which is characterized by extreme thinning of the entire RV wall, and is often referred to as "parchment RV." Aneuysmal dilation has also been seen (8).

There is a familial form of ARVD and the genetic abnormality has been mapped to a gene on chromosome 14 (4,9). This disease can strike young as well as older patients and is seen predominantly in males (10).

ARVD was first described in 1977 and the usual presentation of symptomatic ventricular tachycardia (VT) has been well documented. The biggest risk associated with ARVD is sudden cardiac death; in the past the chance of this occurring was thought to be low (11). In right ventricular cardiomyopathy, the histopathologic features are similar to those of ARVD; this could in fact represent a variant or advanced form of ARVD. However, right ventricular cardiomyopathy, carries a high risk of sudden death (12,13). If this is an advanced form of ARVD, then previous selection may have influenced perceptions that the risk of sudden cardiac death was low in ARVD. These two entities are now thought to be one and the same.

Patients with ARVD often present with VT, with a baseline EKG showing right bundle branch configeration, right axis deviation and T-wave inversions over the right precordial leads (14). Supraventricular arrhythmias also can occur due to the cardiomyopathy involving the RV (15). They appear to be related to abnormalities in sympathetic innervation (16) with increased sympathetic tone being the main determinant leading to VT (17).

The diagnosis can be made with endomyocardial biopsy although fatty infiltration is patchy and false negative biopsy results may be seen. EKG gated spin echo MRI has also been used to identify fat deposits in the RV free wall (18). One report has stated that fat within the RV free wall was seen in less than 50 percent of those with ARVD (19)(Figure 3). Regional wall motion abnormalities are seen in most patients with cine MRI (19).

Signs and symptoms noted at initial presentation are usually subtle (20) and the physical exam is often unremarkable. First signs include palpitations, syncope or even sudden

**Figure 1. Gross specimen of myocardium showing fatty fibrous infiltration of RV.**

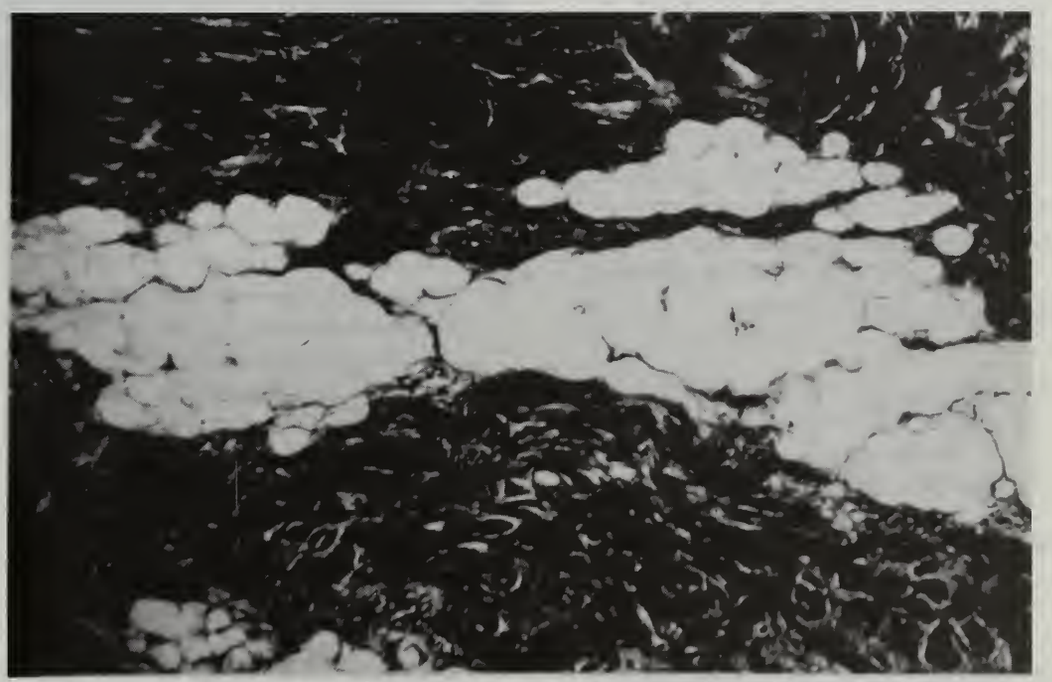

**Figure 2. Histologic view of right ventricle showing fatty fibrous infiltration.** ***(With permission: Azan, magnification x 25).***

death (3,5,13,21,22). Right-sided heart failure is common, but an enlarged RV with normal pulmonary vessels can occur. Most all patients have abnormalities of the RV by echocardiogram (10), CT (23), RV angiography, or MRI (18,19). The LV is usually normal, but left ventricular dysfunction has been seen (24, 25).

Signal averaged EKGs are also abnormal (26, 27). In addition, 12-lead EKGs are abnormal in about 90% of patients with ARVD as described previously (21). No correlation could be found between initial 12 lead EKGs and echocardiographic extent or location of RV involvement (21).

Treatment can be medical or surgical. Medical therapy consists of beta blockade (28, 29). Surgery has also been shown to be successful in some patients with epicardial cryoablation and resection of RV myocardium at foci of VT after myocardial mapping (30). Radiofrequency catheter ablation has been used to ablate the arrythmogenic focus if one can be found by electrophysiologic testing (30). Implantable defibrillators have also been tried with success (31).

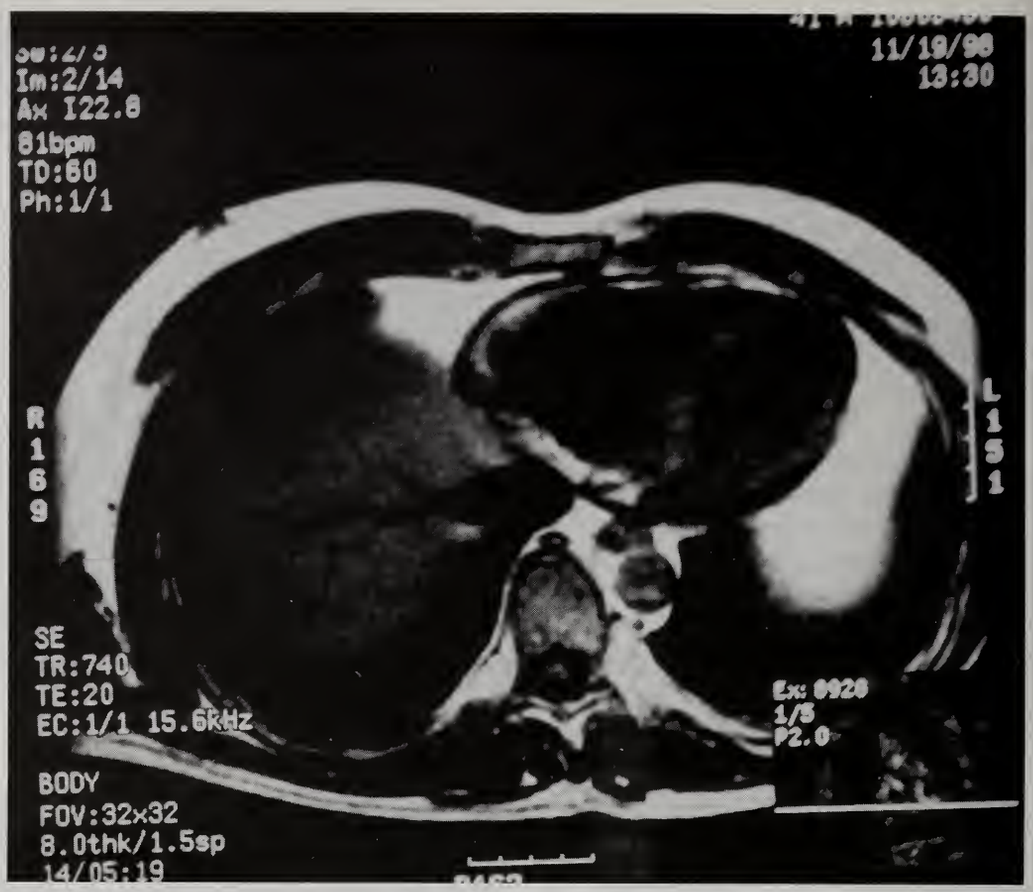


**Figure 3. MRI showing dilated right ventricle and enhanced signal within wall of right ventricle typical of ARVD.**

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***(Please contact the first author for other references in this article.)***

# Hospital autopsies: Still valuable in their traditional role but in need of reform

***JUE-RONG ZHANG, M.D., Ph.D.***
*Dept. of Pathology, Harbor-UCLA Medical Center, Torrence, Calif.;*

***VEENA SHENOY, M.D.***
*Dept. of Pathology, Joan C. Edwards School of Medicine at Marshall University; Dept. of Pathology, Veterans Administration Hospital, Huntington*

***WILLIAM E. MANGANO, M.D.***
*Dept. of Pathology, Charleston Area Medical Center, Charleston*

***HO-HUANG CHANG, M.D.***
*Dept. of Pathology, Joan C. Edwards School of Medicine at Marshall University; Dept. of Pathology, Charleston Area Medical Center, Charleston*

## Abstract

***In 1997, 158 autopsies were performed at Charleston Area Medical Center, a community-based, teaching tertiary care center. The autopsies revealed 29 (18.4%) clinically undiagnosed principal causes of death, of which 79% were considered treatable. The five leading undiagnosed causes were: infarctions, 27.6%; malignant neoplasms, 17.2%; pulmonary emboli, 13.8%; dissecting or ruptured aortic aneurysms, 13.8%; and genetic or congenital disorders 10.2%. These results were significantly different from those reported from some other major tertiary care centers. Reports were completed in 5-302 days (average 59, median 32 days). For more than 40 (25%) of these autopsies, the purpose was only to confirm specific disorders such as occupational injury, which can be accomplished by a highly selective, cost-effective posthumous analysis. In summary, an autopsy in today's high-technology era is still useful, however, the high cost, long length of reporting time, and number of clinically non-enlightening cases are a reasons to reform both the format and procedure in which these procedures are conducted.***

## Introduction

In today's environment of managed care and downsized residency programs, some authors (1,2), medical organizations (3) and hospitals are asking if autopies still play an essential role in medical education, research and patient care.

First, since technology has become so advanced in many medical facilities, some physicians believe that fewer important diagnoses are being missed. Second, since many residency programs have been downsized, the educational function of autopsy is decreasing. A third reason is the considerable amount of time and resources spent on autopsies increases the cost of patient care and these expenses are not reimbursed by Medicare or insurance companies. The final reason autopsies are being questioned is that many physicians are concerned that if an autopsy reveals that an incorrect diagnosis was made, malpractice lawsuits may result.

In response to these concerns, Rosai (4) has proposed reform in the format and procedure to improve cost-effectiveness. Nichols et al (5) and Blosser et al (1) reported on autopsy studies from a major tertiary care transplantation referral center and from a teaching hospital, medical-coronary intensive care unit. Their studies concluded that the traditional autopsy still uncovered a high percentage of important diagnoses missed by high-technology medicine.

To further explore this subject in a community-based, tertiary care medical center, we examined 158 autopsies performed in 1997 at the Charleston Area Medical Center (CAMC), in Charleston, W.Va.

## Materials and methods

The methods were are basically those described by Nichols et al (5) with some modification. Briefly, the postmortem diagnoses were obtained from the final diagnoses of autopsy reports. The premortem diagnoses for inpatients were obtained from the diagnoses coded from the Department of Medical Records at CAMC, and for outpatients from death certificates and medical records attached to the autopsy requests.

The pre- and post-mortem diagnoses were then compared in attempt to uncover new postmortem diagnoses. Only discrepancies between principal pre- and post-mortem diagnoses were presented as clinically undiagnosed conditions. Secondary, minor or incidental findings were not included in the list. Underlying, intervening or immediate causes of death were classified by the guidelines established by Nichols et al (5). All cases were carefully reviewed by two board certified attending pathologists and a senior pathology resident. For questionable cases, original autopsy slides were reviewed again.

During the review, three questions were asked:

1). Are the premortem clinical diagnoses confirmed by autopsy?
2). Are new diagnoses discovered at autopsy?
3). Would newly discovered causes of death have been treatable premortem?

To evaluate cost-effectiveness issues, the average time and cost spent on autopsies were estimated by the Department of Pathology at CAMC. The billing standard for outside autopsies was obtained from the same department.

## Results

### Age and Sex

A total of 158 autopsies were performed in 1997, of which 106 were male and 52 were female, with the male to female ratio being 2:1.

**Table 1. Age and Sex of the 158 Patients Autopsied at CAMC in 1997.**

| Subgroup | | | Subgroup | | |
|---|---|---|---|---|---|
| Age | No. Of Cases | % Of Total No. | Sex | No. of Cases | % of Total No, |
| Stillborn | 23 | 14.6 | F | 15 | 9.5 |
| | | | M | 8 | 5.1 |
| < 1 month* | 7 | 4.4 | F | 4 | 2.5 |
| | | | M | 3 | 1.9 |
| 1- | 0 | 0 | F | 0 | 0 |
| | | | M | 0 | 0 |
| 10- | 2 | 1.2 | F | 2 | 1.2 |
| | | | M | 0 | 0 |
| 20- | 0 | 0 | F | 0 | 0 |
| | | | M | 0 | 0 |
| 30- | 2 | 1.2 | F | 0 | 0 |
| | | | M | 2 | 1.2 |
| 40- | 14 | 8.9 | F | 6 | 3.8 |
| | | | M | 8 | 5.1 |
| 50- | 23 | 14.5 | F | 2 | 1.2 |
| | | | M | 21 | 13.3 |
| 60- | 32 | 20.3 | F | 8 | 5.1 |
| | | | M | 24 | 15.2 |
| 70- | 39 | 24.7 | F | 11 | 7.0 |
| | | | M | 28 | 17.7 |
| 80- | 15 | 9.5 | F | 4 | 2.5 |
| | | | M | 11 | 7.0 |
| 90- | 2 | 1.2 | F | 1 | 0.6 |
| | | | M | 1 | 0.6 |
| Total | 158 | 100 | | 158 | 100 |

** < 1 month is also defined as newborn* ***Male:106 Female:53 M:F = 2.1 Age range 0-97 years*

Of these cases, 104 (66.0%) were actual in-hospital patients, and 54 (34.0%) were outside cases.

The patient's ages ranged from 0 days (stillborn) to 97 years old (Table 1). There were two peaks for the patient's age distribution. The first peak was at stillborn age with 23 autopsies performed (14.6% of the total autopsies), with a male to female ratio of 1:2. This peak subsided at newborn age (< 1 month) and became zero at the age group from 1 to 10 years old. The second peak appeared at age 50 and subsided at age 80. While the total male to female ratio was 2:1, the male to female ratio was 11:1 for patients over 50, a dramatic increase.

### Types of autopsies

Table 2 shows that the types of autopsies varied from complete (no restrictions) to limited types such as chest only, lung only, or brain only, which were done mainly for medical or financial reasons. For example, many of the autopsies done only in the chest/abdomen area reflected clinical interests in the heart and abdominal organs only, while many chest only autopsies were requested by the family to look for occupational lung injury. In some cases, the definitive causes of death were not determined due to incomplete autopsies.

### Classification of cause of death

The causes of death included 56 disorders covering 21 categories of pathologic disorders. Heart and lung disorders were still the first two leading causes of death, followed by central nervous system disorders, accounting for 19.0%, 19.6% and 8.9% of the total cases, respectively. Disorders of infancy and childhood were the fourth leading cause of death (7.0%), in which congenital malformation was the major cause. "Stillborn infants without abnormalities" accounted for a high percentage of cases (14.6%). Undetermined causes due to a limited autopsy accounted for only 5.1% of the total results.

### Comparison of diagnoses

When comparing postmortem (autopsy) diagnoses with premortem (clinical) diagnoses, two situations were encountered.

Two situations were encountered. The first situation is that there were discrepancies between premortem and postmortem diagnoses, i.e., the autopsies uncovered clinically undiagnosed causes of death. The total number of clinically undiagnosed causes was 29, accounting for 18.4% of the total autopsy number. This result is compared to that of Nichols et al (5) (Table 3).

The five leading clinically undiagnosed causes in the present study were:

1. infarctions (including acute myocardial infarction, cerebral infarction and intestinal infarction), 27.6%;,
2. malignant neoplasms, 17.2%;
3. pulmonary emboli, 13.8%;
4. dissecting or ruptured aortic aneurysms, 13.8%; and
5. genetic or congenital disorders 10.2%.

These findings are significantly different from those reported by Nichols et al (5):

1. infection, 43.0%;
2. infarctions, 13.9%;
3. malignant neoplasms, 10.1%;
4. pulmonary emboli, 8.9%; and
5. gastrointestinal ulcers, 8.9%.

**Table 2. The types of autopsies.**

| *Type* | *Number* | *%* |
|---|---|---|
| **Complete** | **95** | **60.1** |
| **Chest and abdomen** | **24** | **15.2** |
| **Chest only** | **24** | **15.2** |
| **Lung only** | **9** | **5.7** |
| **Chest and brain** | **3** | **1.9** |
| **Chest and head** | **1** | **0.6** |
| **Abdomen only** | **1** | **0.6** |
| **Brain only** | **1** | **0.6** |
| **Total** | **158** | **100** |

The other situation encountered is that for disorders such as Alzheimer's disease and simple and complicated coal workers' pneumoconiosis (CWP or "black lung")(6), the definitive diagnosis can only be made by postmortem examination even if they were clinically suspected or "diagnosed." For example, only 40% of clinical dementia patients were diagnosed with Alzheimer's disease by postmortem exam of the brain. Table 4 shows that in this series all three clinically suspected Alzheimer's cases were confirmed by autopsies. This table also shows of the 27 cases (17.1% of the total autopsies) of clinically suspected CWP, 12 (44.4%) were diagnosed as simple and three were diagnosed as complicated (11.1%) CWP. In addition, of the four cases of clinically suspected pulmonary asbestosis, only one was confirmed by postmortem examination.

### Educational utilization

In 1997, there were two pathology residents working in the Department of Pathology at CAMC who performed 34 of the 158 autopsies, accounting for 21.5% of the total cases. Less than 10% of the autopsy cases were presented in the monthly CAMC morbidity-mortality conference. Some cases were presented in regional pathology conferences. There were no conferences specifically dealing with autopsies held on a routine basis.

Autopsies attended by clinical residents (e.g. surgery, internal medicine, Ob/Gyn, etc.) numbered less than 5%.

### Cost-effectiveness issues

The average time spent on a complete autopsy in our study was estimated as follows:

* Pathologist with resident help 3-4 hours
* Pathologist without resident help 8-10 hours
* Resident (10 hours)
* Diener (3-4 hours);
* Histotechnologist (2 hours)
* Secretary and transcriptionist (2 hours)

The total time to complete an autopsy was approximately 15-16 hrs. For in-hospital patients, no resources for compensation could be found. For outside cases, the Pathology Department billed the party requesting the autopsy and the bill was approximately $1,200. This income partially supported departmental educational expenses.

The time for completion of autopsy reports ranged from 5 to 302 days,

**Table 3. Comparison of undiagnosed causes of death.**

| Causes of Death | *Nichols' report* Number | % | *Present report* Number | % |
|---|---|---|---|---|
| 1. Infections | 34 | 43.0 | 2 | 6.9 |
| 2. Infarctions | 11 | 13.9 | 8 | 27.6 |
| 3. Malignant neoplasms | 8 | 10.1 | 5 | 17.2 |
| 4. Pulmonary emboli | 7 | 8.9 | 4 | 13.8 |
| 5. Gastrointestinal ulcers | 7 | 8.9 | 0 | 0 |
| 6. Hemmorrhages | 6 | 7.6 | 1 | 3.4 |
| 7. Thromboses | 3 | 3.8 | 0 | 0 |
| 8. Amyloidosis | 1 | 1.3 | 0 | 0 |
| 9. Genetic hemochromatosis | 1 | 1.3 | 0 | 0 |
| 10. Cardiac tamponade | 1 | 1.3 | 0 | 0 |
| 11. Dissecting or ruptured aortic aneurysm | 0 | 0 | 4 | 13.8 |
| 12. Genetic or congenital disorders | 0 | 0 | 3 | 10.2 |
| 13. Others | 0 | 0 | 2 | 6.9 |

with an average of 59 days and a median of 32 days. These results show that half of the cases were completed in less than 32 days and half in more than 32 days, which included:

2 cases (1.3%) > 300 days,
7 cases (4.4%) > 200 days,
13 cases (8.2%) > 150 days; and
36 cases (22.8%) > 100 days.

### Legal issues

There were no malpractice cases filed in the 158 autopsies we reviewed.

## Discussion

### Age and sex

While the total autopsy male to female ratio was 2:1, the male to female stillborn ratio was 1:2. The implication for a higher female stillborn autopsy rate in our study is uncertain.

The high male to female ratio at ages 50- to 70- (50-, 11:1; 60-, 3:1 and 70-, 2.5:1) may reflect both greater autopsy rates and greater mortality rates for males in these age groups. The higher autopsy rate may be partially explained by occupational injury in this area since CAMC is located in Charleston, West Virginia, an area where coal mines and chemical industries are numerous.

Many coal miners are clinically suspected of having coal workers' pneumoconiosis, which must be confirmed by postmortem exam (6). Table 4 shows that these occupational cases only account for 17.1% of the total cases. The other explanation is that this ratio reflects higher mortality rate of males in these age groups.

### Comparison of diagnoses

The total number of clinically undiagnosed cases was 29, accounting for 18.4% of the total autopsies. This number was much lower than that reported by Nichols et al (5) (44.9%), and it is also lower than that reported by CAP (39.7%) (5). However, our number falls into the traditionally recognized range of 10% to 28% of clinically undiagnosed diseases (7). This result indicates that in today's high-technology era, autopsies still reveal over 1/4 of clinically undiagnosed cases.

The five leading causes of death in our study were significantly different from those reported by Nichols et al (5), reflecting a discrepancy between a major tertiary care transplantation referral center and a community-based, tertiary care hospital. We believe the latter is closer to the general population.

There were 34 cases in our study (21.5% of the total autopsies) involving diseases which could only be definitively diagnosed by postmortem examination. However, we believe that a conventional systematic autopsy investigation was not necessary in these cases and that a highly selective, much quicker posthumous analysis as proposed by Rosai could be performed (7). This service would provide faster results and be more cost effective.

### Educational utilization

As previously mentioned, the overall educational utilization of autopsy is low. This fact supports the idea that most of the autopsies should be treated in a highly selective way like surgical specimens, except those for educational purposes such as ones performed by pathology residents.

### Legal issues

Some authors have (1,5) stated that the fear of litigation after missed clinical diagnoses are discovered by autopsy might keep some physicians from actively encouraging autopsies. In addition, Frankel has suggested that undiagnosed and treatable causes of death discovered at autopsy posed significant malpractice risks.

We agree that there are some litigation risks which may result from autopsies, but in our study, there have been no lawsuits resulting from autopsy results. Prevention of litigation resulting from autopsies is a major issue concerning the future of the postmortem examination.

**Table 4. Definitive diagnosis only by postmorem examination.**

| *Premortem diagnoses* | *# of Cases* | *Postmortem diagnoses* | *# of Cases* |
|---|---|---|---|
| Suspicious for Alzheimer's disease | 3 | Alzheimer's disease | 3 |
| Coal worker's pneumoconiosis | 27 | Simple coal workers' pneumoconiosis | 12 |
| | | Complicated coal workers' pneumoconiosis | 3 |
| Suspicious for pulmonary asbestosis | 4 | Pulmonary asbestosis | 1 |

### Cost-effectiveness issues

The total time spent by a pathologist on an autopsy is about 6 to 8 hours. For this length of time, a pathologist could complete 30-50 surgical cases.

Rosai (4) estimated that the cost of one complete autopsy was approximately $4,000. By using this estimation, the cost of 95 complete autopsies in our study would be $380,000, and the total cost for the 158 autopsies may reach $500,000 to $600,000. This is a significant amount considering the fact that CAMC lost $18 million dollars in fiscal 1998 (9), not an uncommon current financial situation for a hospital.

As stated before, the high cost of an autopsy can be reduced by performing a "highly selective posthumous analysis." In addition, this method can dramatically reduce the length of time to complete an autopsy from 48 to 24 hours (4), thereby providing autopsy results when clinical interest remains at its peak. Adickes and Sims (10) recommended a systemic approach to make the autopies more efficent, with the completion time being reduced from a mean of 57 days in 1992 to 4.8 days in 1994.

## Conclusions

Performance of an autopsy in today's high-technology era still detects clinically undiagnosed causes of death; however, the cost of the service, long length of time for completion of reports, and number of clinically non-enlightening cases are strong evidence in favor of autopsy reform. A highly selective, cost-effective and much faster "posthumous analysis" is one way of achieving this reform.

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# Neuropsychiatric manifestations of a third ventricular colloid cyst

**WALTER A. LAJARA-NANSON, M.D.**
*Department of Neuropsychiatry and Behavioral Medicine, Texas Tech University, Lubbock, Texas*

## Abstract

***A 48-year-old man with no psychiatric history presented with memory disturbances, personality changes, emotional lability and mild paranoia with no evident mood disturbances. A colloid cyst of the third ventricle was discovered and surgically excised.***

## Introduction

Colloid cysts are uncommon, benign, midline tumors that comprise less than 1% of all intracranial neoplasms. They affect males and females with the same frequency and can be completely removed surgically with minimal morbidity and mortality. These tumors have been reported in individuals as young as two months of age, but they rarely declare themselves until adulthood.

Colloid cysts should be suspected in patients who present with intermittent severe bifrontal headaches that sometimes are modified by posture ("ball valve" obstruction of the third ventricle). Sudden onset of headache, obtundation, gait disturbances, incontinence, visual disturbances and sudden falls without loss of consciousness can be presenting signs. Some patients may have no headache and present with symptoms resulting from hydrocephalus and possibly pressure on diencephalic structures (1).

Neuropsychiatric manifestations ranging from a progressive dementia, anxiety attacks, psychosis, emotional lability, apathy, aggressive behavior and personality changes have also been described as presenting signs and symptoms (2).

This report describes the case of a gentleman with no previous psychiatric history who was brought for a psychiatric evaluation as a result of memory, behavioral and thought disturbances associated with a colloid cyst of the third ventricle.

## Case study

A 48-year-old man with no previous psychiatric history exhibited progressively worsening memory disturbances, abnormal behavior and paranoid thinking over a three-year period. His wife reported that he would forget appointments, lose objects around the house and forget people's names in spite of remembering their faces.

A few months prior to his initial evaluation he began to develop significant changes in his personality. He was reported to make sexually inappropriate remarks and jokes to his 12-year-old daughter's friends and waitresses at restaurants. His daughter was uncomfortable around him because he had a tendency to kiss her on the back of the neck and stroke her hair. His wife also reported that there were some restaurants in town where they would not wait on him due to his sexual inappropriateness.

His wife stated that he was constantly "harassing" her for sex and had become somewhat violent and aggressive during sexual intercourse. She also stated that he had begun to use "dirty talk" which was very uncomfortable and unlike him.

At work he had always been an exemplary employee, but now reports from his employer indicated that he was suffering from serious memory disturbances. When confronted with these issues, he said he believed that his co-workers were exaggerating and out to get him.

This patient's father had passed away approximately two years prior to his evaluation and after this he was noted to lose interest in activities he had always enjoyed and reported no energy or motivation to do work around the house. He was also aware of a tendency to cry and brood over simple issues and described himself as being inadequate and worthless. In spite of this, he denied a depressed mood. His wife stated that the family no longer took vacations and that her husband only "sat around" and watched television. He also had suffered from occasional headaches for the past 10 years which responded to over the counter analgesics.

At the time of his initial evaluation, this patient was started on a selective serotonin reuptake inhibitor and liver function studies, electrolytes, thyroid studies and a computerized tomography (CT) of the brain was ordered. All results were normal with

**Figure 1. T1 weighted sagittal MRI showing third ventricular colloid cyst.**

**Figure 2. T1 weighted coronal MRI showing third ventricular colloid cyst.**

the exception of a mass noted to occupy the third ventricle on CT of the brain.

The next day, an MRI of the brain revealed he had a hyperintense, ovoid, well circumscribed mass in the region of the third ventricle consistent with a colloid cyst. This was associated with dilation of the lateral ventricles. No further abnormalities were seen.

He underwent sugical resection of the cyst. Memory disturbances and paranoia did not improve, but it was reported that he no longer engaged in any verbal or physical sexual inappropriateness. He did report erectile dysfunction after the procedure.

## Discussion

This case deserves particular attention for several reasons.

First, although there was evidence that the patient was suffering from some features of major depression, these were only neurovegetative in nature and not a reflection of his mood state. Recognition of this is important in neurologic conditions, particularly those which tend to present with strong neurovegetative signs and symptoms. Parkinson's disease and multiple sclerosis are two common neurologic conditions which have a high incidence of depression, but also present with neurovegetative signs that can be misdiagnosed as major depressive disorder.

Second, the disinhibited behavior, paranoia and a lack of past psychiatric history should lead one to consider the possibility of an underlying medical or neurologic condition. Gewirtz et al (3) in 1994 found that out of 168 patients who presented with psychosis on their first psychiatric admission, over 46% had abnormalities on CT of the brain and one of these was a colloid cyst.

The patient's case described in this article illustrates the importance of neuro-imaging in certain psychiatric patients, particularly those over the age of 40-50 with no previous psychiatric history. It also illustrates the value of the mental status examination in diagnosing conditions with an underlying organic etiology.

**Figure 3. T1 weighted axial MRI showing a third view of the cyst.**

## References

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2. **Jones AM. Psychiatric presentation of a third ventricular colloid cyst in a mentally handicapped woman. *Brit J of Psychiatry* 1993; 63:677-8.**
3. **Gerwitz G, Squires-Wheeler E, Sharif Z, Honer WG. Results of computerized tomography during first admission for psychosis. *Brit J of Psychiatry* 1994;164:790-5.**

# Holloway to be installed as WVSMA president

John D. Holloway, M.D., F.A.C.P., will be inaugurated as president of the WVSMA on Sunday morning, Aug. 27 during the WVSMA's Healthcare Summit 2000 at The Greenbrier. The title of Dr. Holloway's inaugural address will be *"The Medical Profession in West Virginia: Pride and Responsiblity."*

Dr. Holloway is a Wheeling native who received his medical degree from the West Virginia University School of Medicine in 1979. He completed residencies in internal medicine and peripheral vascular disease at the Cleveland Clinic.

Since 1983, Dr. Holloway has practiced internal medicine in Wheeling, where he is very active on the staff at Ohio Valley Medical Center. He is a past president of the medical/dental staff at OVMC and currently serves as chairman of the Dept. of Medicine and is on the Board of Trustees. He also chairs four committees and is medical director of the Vascular Laboratory.

A past president of the Ohio County Medical Society, Dr. Holloway joined

**Holloway**

the WVSMA in 1983 and became a member of Council, where he served until 1996. Since 1992, Dr. Holloway has served on the Resolutions Committee, and since 1993 he has been a member of the Annual Meeting Committee, which he chaired from 1993-94. From 1990-92, Dr. Holloway chaired the WVSMA's Wellness Steering Committee and he was speaker of the House of Delegates from 1996-98, and was vice president of the WVSMA from 1998-99.

Very actively involved in the AMA, Dr. Holloway was an alternate member of the House of Delegates from 1992-95, and he has served since then as a member of the House of Delegates. A fellow of the American College of Physicians and the Society of Vascular Medicine and Biology, Dr. Holloway is also a member of the American Diabetes Association. In addition, Dr. Holloway serves on the Ohio County Board of Health and is a member of the Quality Improvement Committee of the Health Plan of the Upper Ohio Valley.

Dr. Holloway and his wife, Sherry, have two sons. He is the president of the Board of Trustees for the Wheeling Country Day School.

# Kuppusami to be sworn in as president of Alliance

Betty Kuppusami will be installed as the 76th president of the WVSMA Alliance during the WVSMAA's Annual Meeting at The Greenbrier, Aug. 24-26.

Betty has served as president-elect of the WVSMAA for the past year and was treasurer from 1997-99. She has worked on several committees since she became a member of the WVSMAA and she is a past president of the Mercer County Medical Alliance, in which she has also held several offices.

In addition to her Alliance activities, Betty is very active with the Boy Scouts and has served on the Eastern U.S.A. Board and helped start the Tiger Cubs. She has served as camp nurse for a number of years at Boy Scout Camp and organized the "Train the Trainer" program to teach leaders about

**Kuppusami**

scouting. She is an Order of the Arrow scout and she is a recipient of the Silver Beaver Award, the highest honor given to volunteer scout leaders.

Betty holds a bachelor of science in nursing degree from Bluefield State College and she has advanced her education in nursing to the title of registered nurse first assistant. Her husband, Dr. M. Kuppusami, is a general surgeon in Welch and Bluefield and she works as a RNFA in his practice. She is listed in *WHO's WHO in American Nurses* and is a member of the Bluefield State Nurses Academy.

The Kuppusamis live in Bluefield, Va., and they have three sons, a daughter and four grandchildren. She has worked with her local health board on a variety of health programs.

# AMA president, ACP-ASIM consultant, Mayo professor among speakers for Healthcare Summit

A variety of topics of interest to physicians and their office staffs will be featured at the WVSMA's *"Healthcare Summit 2000: Practical Tips With Powerful Results for Physicians and Organized Medicine,"* which will take place from Aug. 25-27 at The Greenbrier. In addition to the summit, a West Virginia Healthcare Leadership Retreat entitled *"Leaders of Organized Medicine Gather to Build Cooperative Relations to Strengthen the Voice of Medicine in West Virginia,"* is set for Thursday, Aug. 24 for Executive Committee, Council, component society and specialty society leaders.

The Healthcare Summit will officially begin with registration at 7:30 a.m. on Friday, Aug. 25. Participants will then have a choice of attending a session on *"Internet Training and Exploration for Physicians"* conducted by Michael J. McCarthy, M.A., assistant dean for Medical Informatics and Information Technologies at Marshall University, or a Loss Control Seminar conducted by Medical Assurance.

At 10:30 a.m., Plenary Session I will convene with WVSMA President Phillip R. Stevens, M.D., presenting welcoming remarks. Next, D. Brent Mulgrew, executive director of the Ohio State Medical Association, will deliver an address entitled *"Organized Medicine — Past, Present and Future: Adapting in an Ever-Changing World."* This session will conclude with the Edmund B. Flink Address, which this year will be presented by Alan R. Nelson, M.D., a former member of the AMA Board of Trustees and a former executive director of the American Society of Internal Medicine, who is currently serving as a special advisor to the ACP-ASIM. Dr. Nelson will speak on *"Physicians Responding to the Medical Error Controversy."*

At noon, a Lunch and Learn will be presented on *"Effective Physician Advocacy on Tobacco Issues and Settlement Allocation."* AMA President Randolph D. Smoak, Jr., M.D., and visiting state presidents will take place in this roundtable discussion.

Smoak

Nelson

Mulgrew

Spelsberg

Clark

Taylor

Brittin

Mann

Following the Lunch & Learn, a meeting of *PIPS (Politically Involved Physicians' Spouses)* will take place. This meeting is open to all physician spouses and Sue McKinney of the Harrison County Medical Society Alliance will preside. The meeting's focus will be *"Strength Through Unity — Share, Compare, Communicate."*

Plenary Session II is scheduled to begin at 1:30 p.m., with an *"Update on Physician Office Compliance Regulations"* presented by Thomas F. Mann, M.D., F.A.C.P., of The Greenbrier Clinic. Following this lecture, Elizabeth Lawton, commissioner of the Bureau for Medical Services; Robert L. Ayers, A.R.M., executive director and Finance Board chairman of PEIA; and Frank Crast, M.D., M.P.H., medical director of Workers' Compensation, will join together for a program on *"Healthcare Financing in West Virginia — Trends in Physician Reimbursement and Utilization Review at Medicaid, PEIA and Workers' Compensation."*

The afternoon's agenda will continue at 3:15 p.m. with concurrent sessions on *"Managed Care in West Virginia"* presented by Hanley C. Clark, West Virginia insurance commissioner; a session entitled *"Internet Discovery Session: Solutions to Enhance Your Practice"* by Michael J. McCarthy of Marshall University; and a lecture on *"A Physician's Role in Reducing Tobacco Use"* by Thomas P. Houston, M.D., director of Science & Public Health Advocacy Programs for the AMA.

Friday evening, a reception hosted by the West Virginia University School of Medicine and the Marshall University Joan C. Edwards School of Medicine will take place from 5:30 p.m. - 7 p.m. Entertainment with the Columbus band Phil Dirt and the Dozers, a nationally-known group who play a selection of 50s, 60s and 70s rock 'n' roll music, will kick off at 9 p.m.

Saturday's agenda will begin with registration and exhibit visitation at 7:30 a.m. and concurrent sessions at 8 a.m. Participants may attend the lecture *"Medicine and Public Health Opportunities Through Healthy People 2010,"* by Henry G. Taylor, M.D., M.P.H., commissioner of the WV Bureau for Public Health, or learn

how to improve their communication and presentation skills with Diana Sole, owner and president of MotionMasters in Charleston.

*"Healthcare Issues in the 2000 Election: The Candidates' Platforms"* will be the focus of Plenary Session III at 9 a.m. which will highlight the state's gubernatorial and Congressional candidates. Invited participants are the Honorable Cecil H. Underwood, the Honorable Bob Wise, the Honorable Shelley Moore Capito and former State Senator Jim Humphreys.

After a brief break, Plenary Session IV will begin at 10:45 a.m. with the lecture *"Practicing the Ministry of Medicine in Our Litigious Cultural Milieu"* by the Rev. Father James M. Sobus of St. Michael Parish in Wheeling. Next, AMA President Randolph D. Smoak, Jr., M.D., will address meeting participants. Dr. Smoak is a board-certified surgeon from Orangeburg, S.C., who is dedicating his year as AMA president to the issues of women as medical decision makers in health care, the role of American medicine in the global community, and the AMA's continuing role in health system reform.

At noon, the second Lunch & Learn will focus on *"State of the States in Healthcare: Advocacy, Issues and Agendas for 2000 and Beyond."* AMA President Dr. Randolph D. Smoak, Jr., and the visiting state presidents will join together for this roundtable discussion.

Following the Lunch & Learn, the Exhibit Hall will close at 1:30 p.m. and the golf, tennis and volleyball tournaments will begin at 2 p.m. The day's activities will conclude with a reception hosted by Medical Assurance of WV at 6 p.m.

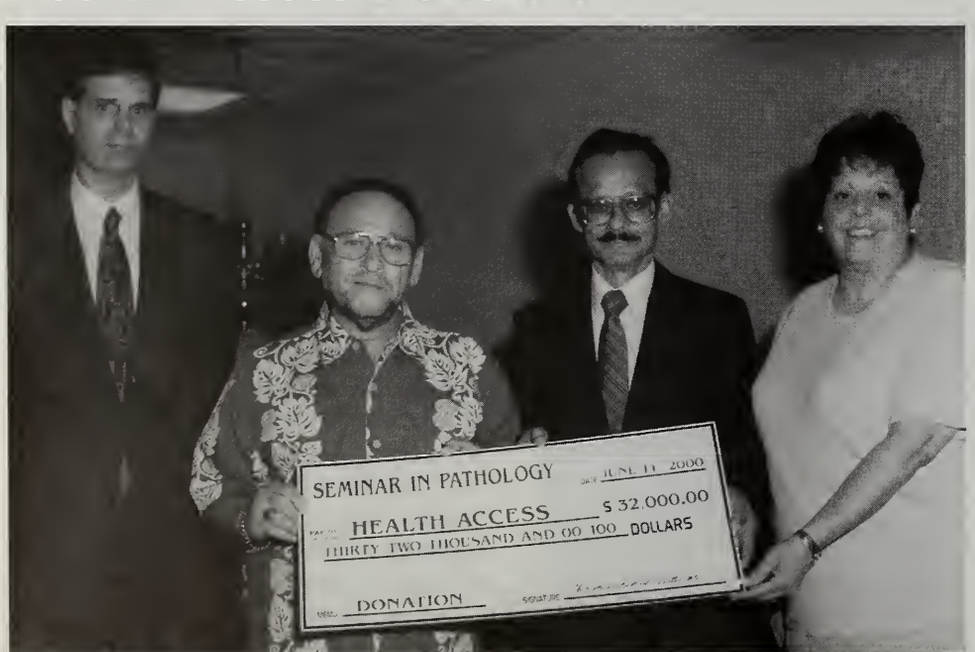
On Sunday, registration will take place from 7:30 a.m. - 9:30 a.m., with Plenary Session V beginning at 8 a.m. This session will feature the Thomas L. Harris Address on *"Gene Therapy and the Human Genome"* by Thomas C. Spelsberg, Ph.D., the George M. Eisenberg professor of the Dept. of Biochemistry and Molecular Biology at the Mayo Clinic and Mayo Graduate School of Medicine, who serves as director of Mayo's Genome Education Project. After Dr. Spelsberg's presentation, Alexander J. Brittin, Esq., a partner and co-chair of McKenna & Cuneo's Information Privacy and Security Practice Group in Washington, D.C., will speak on *"Medical Confidentiality and HIPAA."*

Plenary Session VI, scheduled for 10:15 a.m., will feature the Honorable Elliott "Spike" Maynard, chief justice of the WV Supreme Court of Appeals, discussing *"The Future of the Courts: West Virginia's Chief Justice Speaks."* Immediately following, the WVSMA's new officers will be installed and John D. Holloway, M.D., who will serve as president of the WVSMA for the next year, will deliver his inaugural address entitled *"The Medical Profession in West Virginia: Pride and Responsibility."*

The summit will conclude with a reception hosted by the Ohio County Medical Society to honor all of the new WVSMA and WVSMAA officers.

A total of 15.25 CME hours is being offered for the summit and a schedule of the events is published on pages 520 and 521. To register or obtain more information, phone the WVSMA at (304) 925-0342.

## Health Access Donation




**Dr. Chinmay K. Datta *(third from left)*, a pathologist at United Hospital Center in Clarksburg, presents Louis Iquinto, president of the Health Access Board of Directors, with a check for $32,000, which represents the proceeds of the Seventh Annual Seminar in Pathology. Since its inception in 1994, proceeds from the Seminar in Pathology totaling $154,000 have been donated to Health Access, a Clarksburg-based, free clinic for patients who do not have insurance. Also pictured are Bruce C. Carter *(left)*, president and CEO of United Hospital Center, and Kathie Wilson (right), executive director of Health Access.**

## *Six physicians honored as star recruiters by AMA*

Drs. Constantino Amores, David W. Avery, James Bryant, James Helsley, and John Holloway were recently honored during the AMA's Annual Meeting in Chicago as star recruiters from the House of Delegates Outreach Program, and Dr. Mudassir Nawaz was recognized as a star recruiter for the Resident and Fellow Section.

Outreach programs are coordinated campaigns in which members of the AMA are asked to undertake peer-to-peer recruitment of the non-member colleagues. This year, a total of 2,888 new resident, physician and student members joined the AMA as a result of outreach programs.

# WV Chapter of ACS celebrates 50 years

**The WV Chapter of the American College of Surgeons conducted its 50th Annual Meeting at The Greenbrier from May 4-6. At the meeting, Dr. Harvey Bender, president-elect of the ACS, presented a commemorative charter to Dr. E. Phillips Polack, president of the chapter, and Dr. Alvin L. Watne delivered the keynote address on the history of the chapter. The 2000 Council of the WV Chapter of the ACS are pictured above: *(First row)* Dr. Generoso Duremdes, councilor; Dr. Eric P. Mantz, governor; Dr. Ronald C. Hill, councilor; Dr. R. C. Shah, immediate past president; Dr. David A. Kappel, trauma chairman; Sharon Bartholomew, administrator; Dr. Robert A. Gustafson, first vice president; Dr. E. Phillips Polack, president; and Dr. R. Sam Oliver, councilor. *(Second row)* Dr. Roger E. King, secretary/treasurer; Dr. James H. Morgan III, councilor; Dr. Amabile Milano, councilor; Dr. Kyle F. Fort, second vice president; Dr. Bonnie Beaver, councilor; Dr. Clemente C. Diaz; and Dr. David A. Denning, cancer chairman.**

## Physicians should see payment soon in BC/BS liquidation

A hearing is expected soon in Kanawha County Circuit Court to resolve the last few remaining issues in the final liquidation of Blue Cross Blue Shield of West Virginia, Inc., and physicians who filed claims should expect to receive a distribution in the next few months, with total payments to physicians exceeding $3 million.

Throughout this much-litigated matter, the WVSMA has advocated that physicians had a priority lean over many other creditors and be placed in a Class II status. (Class I is reserved for certain priority creditors and there was never an opportunity for physician inclusion.) The WVSMA was successful in gaining Class II status despite the best efforts of other creditors who sought to make physician priority subordinate to their own. Physicians should receive about 50 cents on the dollar for their claims later this year.

## *Medical Assurance and Professionals Group merge*

Medical Assurance, Inc., the WVSMA's endorsed professional liability carrier, recently announced an agreement to consolidate with Professionals Group, Inc., thus forming the third largest writer of medical liability insurance.

The merger expected to be completed in early 2001, reinforces Medical Assurance's promise of protection to WV policyholders. A. Derrill Crowe, M.D., Medical Assurance's president, chairman and CEO said the company is "confident this combination will enhance the financial security our policyholders have always counted on."

Medical Assurance, recently requested a rate increase due to the increasing frequency and severity of the state's medical malpractice claims. This 35% overall increase was granted by the state Insurance Commissioner and became effective August 1.

## Dr. Massenburg named Distinguished West Virginian

Charleston psychiatrist Dr. Jerome Massenburg was recently named a Distinguished West Virginian by Governor Cecil Underwood.

Dr. Massenburg received this award for his outstanding achievements in medicine and his numerous contributions to his community and the citizens of West Virginia.

## Bofill installed as president of Tri-State Fil-Am Association

Dr. Rano S. Bofill was inducted by Governor Cecil Underwood as the new president of the the Tri-State Fil-Am Association of West Virginia, Kentucky and Ohio Medical Section on May 27.

Dr. Bofill is also currently president of the Philippine American Association of Family Physicians.

# CME & Special Events

## Camcare Health Educ. & Research Institute

***"11th Annual Respiratory Care Seminar"***
Sept. 13, George L. Zaldivar, program chairman, Robert C. Byrd HSC Auditorium, Charleston

***"Pediatric Advanced LIfe Support Renewal Course"***
Sept. 18, Nov. 17 & Dec. 10, 8 a.m. - 4:30 p.m., Camcare Institute Education and Training Center, Charleston

***"Surgical Treatment of CHD"***
Sept. 19, 6:30 p.m., Kourosh Ghalili, M.D., Roane General Hospital, Spencer

***"Neurological Update"***
Sept. 27, 6:30 p.m., Constantino Amores, M.D., Summers County ARH,

***"Advanced Cardiac Life Support Renewal Course"***
Sept. 29, Nov. 16 & Dec. 8, 8 a.m. - 4:30 p.m., Robert C. Byrd HSC, Charleston Division

***"Advanced Cardiac Life Support Provider Course"***
Sept. 30-Oct. 1, Nov. 17-18, & Dec. 9-10, 8 a.m. - 4:30 p.m., Robert C. Byrd HSC of WVU, Charleston Division

***"Difference Between Schizophrenia and Bipolar Disease"***
Oct. 4, 12:30 p.m., Martin Kommor, M.D., Montgomery General Hospital, Montgomery

***"10th Annual Vascular Surgery Conference"***
Oct. 7, 8 a.m. - noon, Ali F. AbuRahma, M.D., program chairman, Robert C. Byrd HSC, Charleston Division

## Huntington Medical Education Foundation

***"Marshall University Special Outreach - Pain Management Conference"***
Sept. 7, 4:45 p.m. - 9:30 p.m., The Brass Tree Restaurant, Williamson

***"Pain Assessment"***
Sept. 11, 6 p.m., Charles McCormick, M.D., Western Medical Society

***"Get Smart About Strokes"***
Sept. 13, 6 p.m., M. Jerry Day, M.D., Logan General Medical Society, Logan

***"Marshall University Special Outreach - Occupational Medicine Conference"***
Sept. 23, 8 a.m. - 1

***"TBA"***
Sept. 26, 6:30 p.m., Tri-County Medical Society, Paintsville, Ky.

## The Joan C. Edwards School of Medicine at Marshall University

***"10th Annual Cancer Conference"***
Sept. 15, 8 a.m., St. Mary's Hospital, Huntington

***"14th Annual Alumni Weekend Conference: Women's Health"***
Sept. 27-29

***"CME Special: Palliative Cancer Care"***
Oct. 13, 7:30 a.m., Robert Twycross, D.M., F.R.C.P., F.R.C.R., Oxford University

## Robert C. Byrd HSC - Morgantown

***"Antonio Palladino Memorial Lecture"***
Sept. 13 *(sponsored by WVU Dept. of Obstetrics/Gynecology)*, Robert C. Byrd HSC, Morgantown

***"WVU Annual Thought Disorders Conference: Psychosis 2000"***
Sept. 15 *(sponsored by the WVU Dept. of Behavioral Medicine and Psychiatry)*, Ramada Inn, Morgantown

***"Neurosciences Teaching Weekend"***
Sept. 15-16 *(sponsored by the WVU Depts. of Neurology and Neurosurgery)*, Robert C. Byrd HSC, Morgantown

***"Wild Wonderful West Virginia Anesthesia Review"***
Sept. 17-20 *(sponsored by the WVU Dept. of Anesthesiology)*, Oak Hill

**"Surgery Update 2000"**
Sept. 17-20 *(sponsored by the WVU Dept. of Surgery and WVACS)*, Robert C. Byrd HSC, Morgantown

***"26th Annual Hal Wanger Family Medicine Conference"***
Oct. 5-7 *(sponsored by the WVU Dept. of Family Medicine)*, Robert C. Byrd HSC, Morgantown

***"Issues in Caring for Patients Undergoing Blood and Marrow Transplantation"***
Oct. 6 (*sponsored by Mary Babb Randolph Cancer Center*), Days Inn, Flatwoods

## West Virginia State Medical Association

***"Healthcare Summit 2000: Practical Tips with Powerful Results for Physicians and Organized Medicine"***
Aug. 24-27, The Greenbrier, White Sulphur Springs

# Poetry Corner

## The Nature of Man

When I look at the strength
Of the mountains
By the tender clouds caressed
I feel that I will be ever secure
for I am wonderfully blessed

When I look at the turbulent river
As it rushes to the sea
I feel the peace of timelessness
Living inside of me

When I look at the beauty of flowers
proclaiming the freshness of spring
I feel my life transcending
The joy that my senses bring

Nature speaks to all of us
If only we will hear
It speaks of life . . . of growth . . . of love
Increasing every year

When I look at the kindness of summer rain
As it bathes the weary land
I feel that I must give to all
My love . . . a helping hand

When I look at the wonder of starlight
Dancing in the sky
I feel the infinite goodness
. . . The soul that will never die

Ernest N. Hart Jr., M.D.

# West Virginia State Medical Association

# HEALTHCARE SUMMIT 2000:

*Practical Tips with Powerful Results for Physicians & Organized Medicine*

**PRE-SUMMIT PROGRAM -- WEST VIRGINIA HEALTHCARE LEADERSHIP RETREAT**

## *Thursday, August 24*

10:30 - 11:30 a.m. **Executive Committee Meeting**
*Phillip R. Stevens, MD*
*WVSMA President, presiding*

11:30 - 12:30 p.m. **Council Meeting**
*David W. Avery, MD*
*WVSMA Council Chairman, presiding*

12:30 - 4:30 p.m. **WV Healthcare Leadership Luncheon & Retreat** (By Invitation)
Executive Committee, Council, Component Society, and Specialty Society Leadership
*"Leaders of Organized Medicine Gather to Build Cooperative Relations to Strengthen the Voice of Medicine in West Virginia"*

2:30 - 5:30 p.m. **Registration**

6 - 7:30 p.m. **President's Reception**
Summit attendees are invited to attend.
*Hosted by the Cabell County Medical Society*

**HEALTHCARE SUMMIT 2000 -- CONFERENCE BEGINS**

## *Friday, August 25*

7:30 a.m. - 5 p.m. **Registration**

9:30 a.m. **Exhibit Hall Opens**

8 - 10 a.m. **Concurrent Session I**
- Internet Training and Exploration for Physicians
  *Michael J. McCarthy, Assistant Dean for Information Technology and Medical Informatics, Marshall University*
- Your Practice -- Your Best Defense
  Medical Assurance Loss Prevention Seminar

10:30 - 11:45 a.m. **Plenary Session I**
- WVSMA President's Welcome and Remarks
  *Phillip R. Stevens, M.D.*
- Organized Medicine – Past, Present and Future: Adapting in an Ever-Changing World
  *D. Brent Mulgrew, Executive Director, Ohio State Medical Association*
- Flink Address
  *Physicians Responding to the Medical Error Controversy*
  *Alan R. Nelson, MD, MACP*

11 a.m. - Noon **Medical Education Committee Meeting**
*James D. Helsley, MD, presiding*

Noon - 1:30 p.m. **WVMI Board Meeting**

Noon - 4:30 p.m. **WV Psychiatric Association Meeting**
*Martin Kommor, MD, presiding*
- Neuroimaging Studies of Major Depresssion: Implications for Antidepressant Treatment
  *Wayne C. Drevets, MD*

Noon - 1:15 p.m. **Lunch and Learn I**
- Effective Physician Advocacy on Tobacco Issues & Settlement Allocation
  *Roundtable Discussion with Visiting State Presidents and Randolph D. Smoak, Jr., MD, AMA President*

1:30 - 2:45 p.m. **Plenary Session II**
- Update on Physician Office Compliance Regulations
  *Thomas F. Mann, MD, FACP, The Greenbrier Clinic*
- Healthcare Financing in West Virginia — Trends in Physician Reimbursement and Utilization Review at Medicaid, PEIA, and Workers' Compensation
  *Elizabeth Lawton, Commissioner, Bureau for Medical Services*
  *Robert L. Ayers, A.R.M., Executive Director, Finance Board Chairman, Public Employees Insurance Agency*
  *Frank Crast, MD, MPH, Medical Director, Workers' Compensation*

1:30 - 2 p.m. **PIPS (Politically Involved Physician Spouses) Meeting** *"Strength Through Unity — Share, Compare, Communicate*
*Sue McKinney, HCMS Alliance, presiding*

3:15 - 5 p.m. **Concurrent Session II**
- Managed Care in West Virginia
  *Hanley C. Clark, WV Insurance Commissioner*
- Internet Discovery Session: Solutions to Enhance Your Practice
  *Michael J. McCarthy, Assistant Dean for Information Technology and Medical Informatics, Marshall University*
- A Physician's Role in Reducing Tobacco Use
  *Thomas P. Houston, M.D., Director, Science & Public Health Advocacy Programs, AMA*

## *Friday, August 25*

3:15 - 5 p.m. **Mid-Winter Clinical Conference Committee Meeting**
*Daniel S. Foster, MD, presiding*

3:15 - 5 p.m. **WV Orthopedic Society Meeting**
*Frederick Pollack, MD, presiding*

3:15 - 5 p.m. **WVSMA Cancer Committee Meeting**
*Catalino Mendoza, Jr., MD, presiding*

3:15 - 5 p.m. **WVMI Scientific Meeting**
*George Pickett, MD, MPH, presiding*
Electronic Medical Records in the Primary Care Office: A Diabetes Information System
*George Pickett, MD, MPH, WVMI Medical Director & Steve Beckman, WVMI Chief Information Officer*

5:30 - 7 p.m. **Reception**
*Hosted by the West Virginia University School of Medicine and the Marshall University Joan C. Edwards School of Medicine*

9 p.m. **Entertainment**
*Phil Dirt and the Dozers*

## *Saturday, August 26*

7 - 11 a.m. **WV State Radiological Society Meeting**
*Joe Skeens, MD, presiding*
Recent Advances in Stroke Imaging
*Alexander M. Norbash, MD, Assistant Professor of Radiology Brigham & Women's Hospital*

7:30 am - 1:30 p.m. **Registration/Exhibit Visitation**

8 - 9 a.m. **Concurrent Session III**
- Medicine & Public Health Opportunities Through Healthy People 2010
  *Henry G. Taylor, MD, MPH, Commissioner, WV Bureau for Public Health*
- Unlocking Powerful Presentation Skills for Physicians
  *Diana Sole, President, MotionMasters*

9 - 10:30 a.m. **Plenary Session III**
- Healthcare Issues in the 2000 Election: The Candidates' Platforms - Gubernatorial and Congressional Candidates
  *Invited Participants:*
  *Honorable Cecil H. Underwood*
  *Honorable Bob Wise*
  *Honorable Shelley Moore Capito*
  *Former State Senator Jim Humphreys*

10:45 a.m. - Noon **Plenary Session IV**
- Practicing the Ministry of Medicine in Our Litigious Cultural Milieu
  *Rev. Father James M. Sobus, St. Michael Parish*
- AMA President's Message
  *Randolph D. Smoak, Jr., MD, AMA President*

Noon - 1 p.m **Lunch & Learn II**
- State of the States in Healthcare: Advocacy, Issues and Agendas for 2000 and Beyond
  *Roundtable Discussion with Visiting State Presidents & Randolph D. Smoak, Jr., MD, AMA President*

1:30 p.m. **Exhibit Hall Closes**

2 p.m. **Recreational Activities**
- Golf tournament (Old White Course)
- Tennis tournament (Hilltop Courts)
- Volleyball (Located above Hilltop Courts)

6 - 7:30 p.m. **Reception**
*Hosted by Medical Assurance of WV*

## *Sunday, August 27*

7:30 - 9:30 a.m. **Registration**

8 - 9:45 a.m. **Plenary Session V**
- Harris Address
  Gene Therapy and the Human Genome
  *Thomas C. Spelsberg, Ph.D, George M. Eisenberg Professor & Director of the Genome Education Project, Department of Biochemistry and Molecular Biology, Mayo Clinic and Medical School*
- Medical Confidentiality and HIPAA
  *Alexander J. Brittin, Esq., McKenna & Cuneo, L.L.P.*

10:15 - 11:30 a.m. **Plenary Session VI**
- The Future of the Courts: West Virginia's Chief Justice Speaks
  *Hon. Elliott "Spike" Maynard, Chief Justice, WV Supreme Court of Appeals*
- WVSMA Officer Installation
- President's Address
  "The Medical Profession in West Virginia: Pride and Responsibility"
  *John D. Holloway; MD, WVSMA President, 2000-2001*

11:30 - 12:30 p.m. **President's Reception**
*Colonial Lounge and Terrace*
*Hosted by the Ohio County Medical Society*

12:30 p.m. **Summit Concludes**

# Bureau for Public Health News

***This page paid for by the West Virginia Bureau for Public Health.***

## Minority Initiatives in Cardiovascular Health underway

Statistics from the Bureau for Public Health's recently released West Virginia Minority Health Chartbook, indicate the death rate for African Americans suffering from heart disease is much higher than that of Caucasians. Rates for years of potential life lost (YPLL) are also much higher for blacks than whites, which means African Americans are dying from these diseases at younger ages.

Now, there is a project to assist the African American community in adopting heart healthy habits, break the cycle of poor health and premature death due to heart disease and reduce the health disparities that exist among populations. Minority Initiatives in Cardiovascular Health, administered by the WV Bureau for Public Health, began in October 1999 to promote better nutrition, increased physical activity and the elimination of tobacco use.

Cardiologist Ron McCowan, an advisor for the project, says, "These findings are in part related to minority's problems with access to appropriate medical care and their preconceived notions and beliefs that hinder positive working relationships between the healthcare deliverer and the patient. However, at the root lies the lack of control of major cardiovascular risk factors, such as uncontrolled hypertension, persistent elevation of serum cholesterol, continued smoking, physical inactivity, uncontrolled diabetes and obesity."

Jessica Wright, program manager for the WV Cardiovascular Health Program, said, "Because the African American population in our state is relatively small, we have a better chance of decreasing this disparity by identifying a specific population with specific needs. The Project is delivering its message through the faith community, targeting churches with a mainly African American congregation."

According to project advisor James Patterson, pastor of the Institute Church of the Nazarene, "The African American church takes the prophetic approach to ministry, meaning one that is not only concerned with saving the soul, but the entire person; spiritually, emotionally and physically. Because of its dominant influence in the African American community, the church is in a unique position to address a variety of issues. At present, we are using health ministries to promote fitness, encourage proper diet and achieve overall good health among members of our congregations."

Pamela Minimah, chair of the West Virginia Coalition for Minority Health, says, "The Coalition is excited about partnering with the Bureau for Public Health in this endeavor. It is crucial that we raise the awareness level of African Americans regarding the risk factors that effect their health and we won't let up until we see those risk factors diminished."

Project coordinator Sandra Burrell said, "The outreach methods used are successful primarily because the target population has been at the table with us from the beginning. No one knows what will work in the African American community better than those who live there."

During this first year of the project, the emphasis has been on building health ministry networks in Kanawha, McDowell and Raleigh Counties. Under Rev. Patterson's guidance, focus groups have also been held with McDowell County pastors. This coming year the project will branch out to include Cabell, Mercer, Fayette and Jefferson Counties. These seven represent 67% of the total African American population in West Virginia. In addition to expanding the health ministry network, mini-grant opportunities will also be provided to individual congregations.

Kara Chandler, nutritionist and exercise physiologist for the WV Diabetes Program, said "Research shows that diabetes is an independent risk factor for cardiovascular disease and it exists disproportionately higher among minority populations in West Virginia." According to the Minority Health Chartbook, 12.7% of African Americans suffer from diabetes as compared to 5.5% of Caucasians and the diabetes death rate is 53.5 per 100,000 as compared to 23.3. For this reason, the Diabetes Control Program is also an active partner on the Minority Initiatives Project.

According to Burrell, "One of the most exciting things about the Project is the opportunity for small, rural churches, to be able to get some assistance in promoting heart-healthy activities. It's a beginning."

## Public Health Calendar

### September

Baby Safety Month

Children's Eye Health & Safety Month

Healthy Aging Month

Leukemia Awareness Month

National Cholesterol Education Month

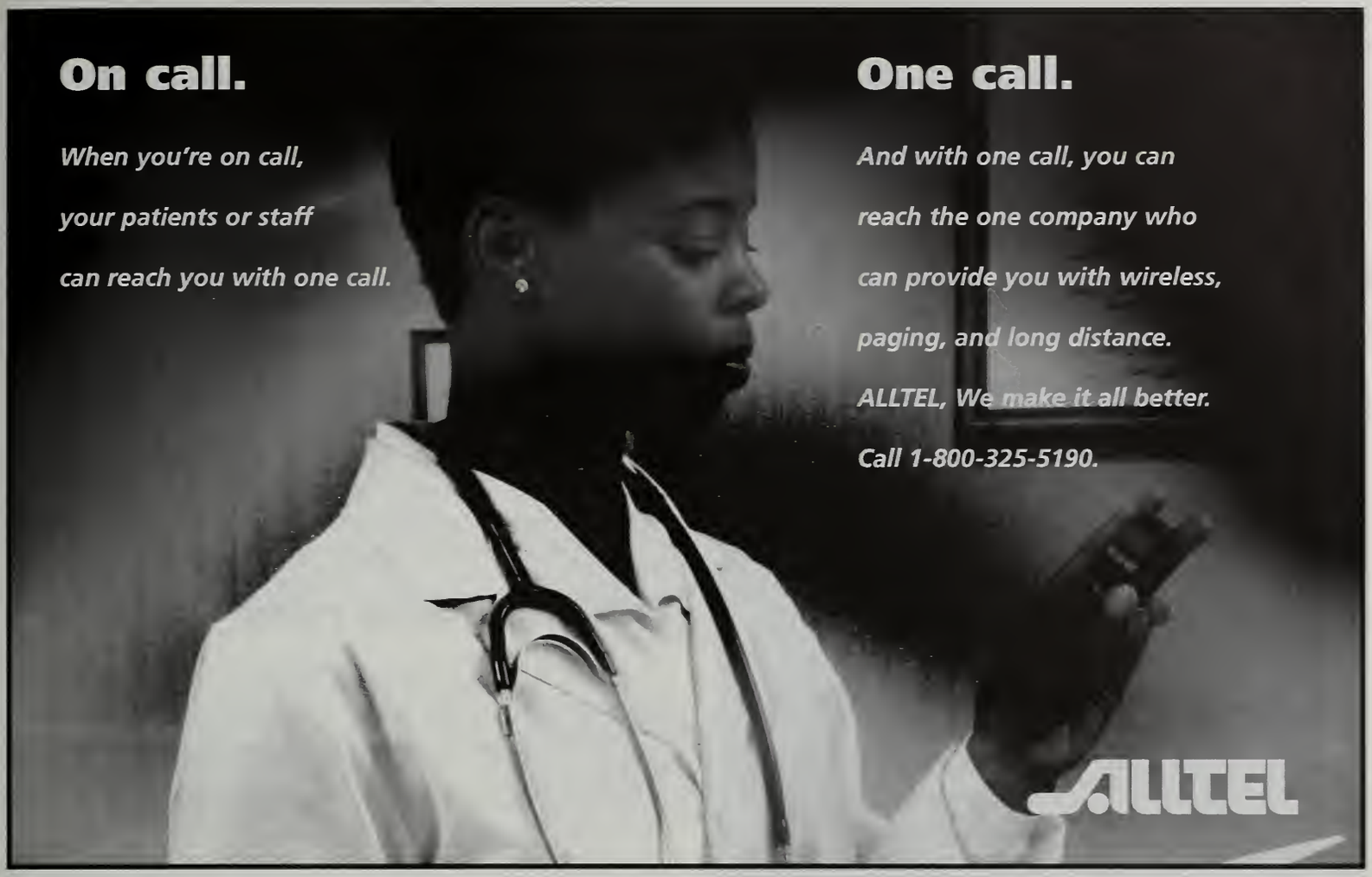
National Sickle Cell Awareness Month

National Childhood Injury Prevention Week (1-7)

A Day for Better Health Week (10-16)

Neonatal Nurses Day (15)

National Prostate Awareness Week (18-22)

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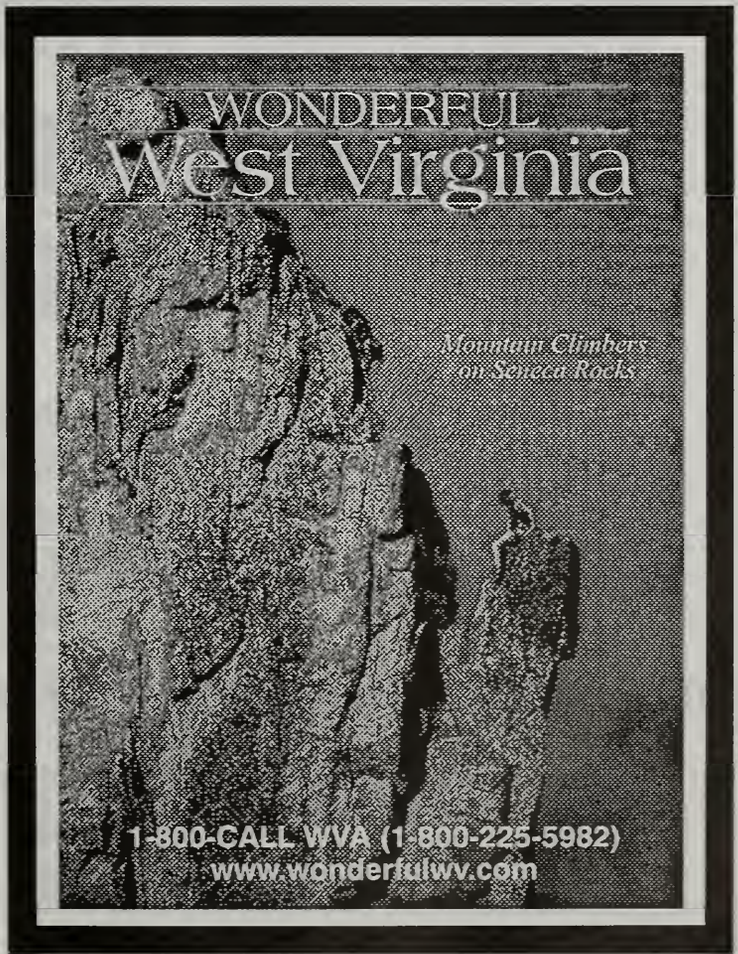


# Robert C. Byrd Health Sciences Center of West Virginia University News

## WVU collaborating with WHO as a result of Rural Aging Conference

**TV personality Willard Scott joins Dr. Robert D'Alessandri, vice president for WVU Health Sciences, at the podium during the 2000 International Rural Aging Conference in Charleston.**

Over 3,000 attendees from 40 nations shared success stories and outlined challenges facing older people around the world during the International Rural Aging Conference in Charleston, June 7-11, which was hosted by WVU's Center on Aging. During the conference, Alexandre Kalache, chief of the World Health Organization's aging and health promotions programs, announced that WVU's Center on Aging will be a Collaborating Center on Rural Aging with the WHO.

"We are honored to be chosen for this task," said Dr. Hana Hermanova, who leads the WVU center. "This means that we will assume accountability for the implementations of programs proposed both at the Charleston conference and at subsequent WHO and the United Nations sessions."

WVU plans to host another such conference in 2003 or 2004, said Dr. Robert D'Alessandri, vice president for WVU Health Sciences, who chaired the event.

## Hal Wanger Conference Oct. 5-7

The Hal Wanger Family Medicine Conference will take place Oct. 5-7 in the main auditorium at WVU's Robert C. Byrd Health Sciences Center.

Dr. Daniel Alkon, director of the Blanchette Rockefeller Neurosciences Institute, a new joint venture between WVU and Johns Hopkins University, is one of the guest speakers.

## Ferrari, Doyle share this year's distinguished teacher award

Dr. Norman Ferrari, associate dean for student services, and Dr. Greg Doyle, of the Dept. of Family Medicine, are co-recipients of the School of Medicine's Distinguished Teacher Award. They were chosen by a committee made up of faculty from each department, students from each of the four med school classes and two graduate students.

## Fisher, Schochet receive awards

Dr. Melanie Fisher of the Dept. of Medicine and Dr. Sydney Schochet of the Dept. of Pathology were presented the top faculty awards at the School of Medicine's annual awards ceremony.

Dr. Fisher won the John W. Traubert Award, an honor that recognizes a basic science or clinical faculty member who displays the characteristics of honest and ethical communication, respect, approachability, a positive attitude and a willingness to serve as a mentor. Dr. Schochet won the MacLachlan Award, which recognizes the outstanding teaching efforts of a faculty member in basic sciences.

## WVU welcomes 28 new faculty

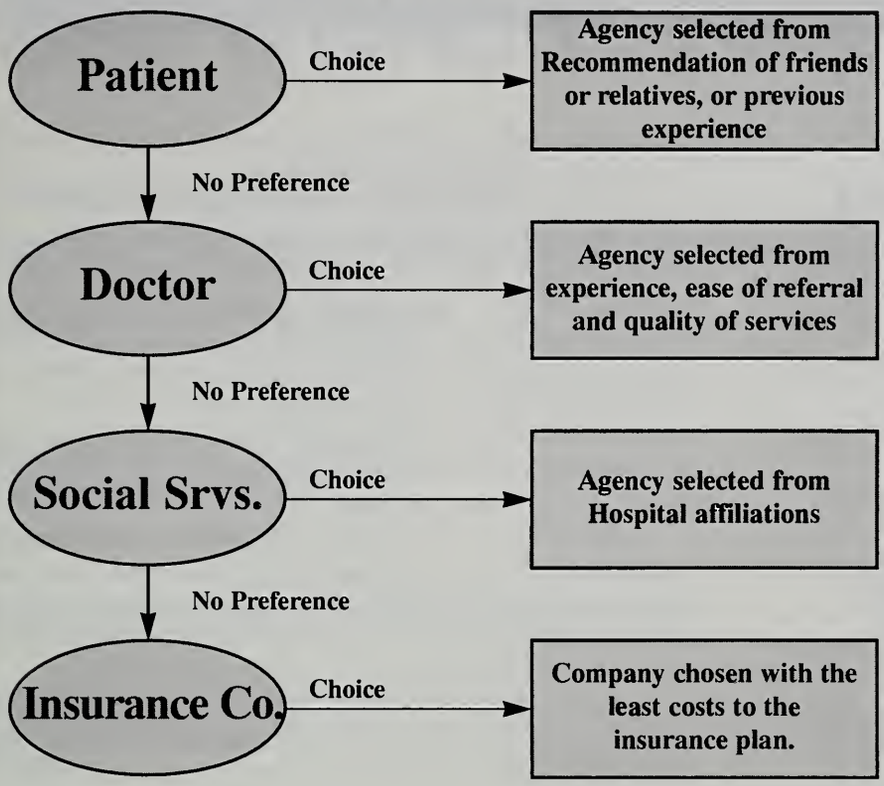
These physicians have joined the Morgantown campus:

**Behavioral Med./Psychiatry:** Dr. Kristina Curci-Royane; Dr. J. Scott Mizes; Dr. Michael Parsons
**Family Medicine:** Dr. Matthew Brunner
**Nephrology:** Dr. Anatole Besarab
**Neurology:** Dr. David Libell
**Neurosurgery:** Dr. Julian Bailes
**Pathology:** Dr. Luis Flores
**Pediatrics:** Dr. Tina Slusher; Dr. Nancy Brunner; Dr. Balaram Gangaram; Dr. Harriet Hadley
**Radiology:** Dr. Jeff Carpenter; Dr. Michael Galloway; Dr. Diego Martin; Dr. John Stageberg
**Surgery:** Dr. David McFadden; Dr. Lakshmikumar Pillai; Dr. Ganga Prabhadar

These physicians have joined the Charleston Division:

**Behavioral Med./Psychiatry:** Dr. Carol Freas
**Family Medicine:** Dr. Gregg Jarrell; Dr. William Johnson; Dr. Denise Priddy
**Internal Medicine:** Dr. Edward Bottei
**OB/GYN:** Dr. Yvette Gordon, Dr. S. Greg Heywood
**Surgery:** Dr. Michael Covelli, Dr. David Gordon

# Healthcare — Who's Choice is it?

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# The Joan C. Edwards School of Medicine at Marshall University

## Walker honored as top U.S. educator in rural health field

Dr. Robert B. Walker of Marshall has been honored as the nation's top rural health professor by the National Rural Health Association.

"This is an extraordinary award, and so richly deserved," said Dean Charles H. McKown, M.D., of the NRHA's Distinguished Educator Award, which was presented to Dr. Walker May 26. "Our faculty and students have always considered Dr. Walker's contributions outstanding, and it's nice to know that the national leaders in the field of rural health share that belief."

The association judged nominees on criteria such as the significance of their work to rural health, the scope of their accomplishments, and evidence of the impact of their work. In announcing the award, the NRHA described Dr. Walker as "an advocate and innovator in developing programs for rural-based training of medical students." One program it cited was at one point the nation's second-leading program in years of physician service provided to rural areas. Another program, the Marshall Primary Care Curriculum, is producing graduates who are more likely to choose to serve underserved and disadvantaged populations.

The NRHA also noted Dr. Walker's active involvement in rural health policy. He helped prepare the Study of Rural Health in America for the U.S. Congress, and twice was invited to the White House to discuss the impact of proposed health care reform on rural America.

Dr. Walker said he was honored to accept the award, but that the credit belongs to many. "In reality this really is an award for this department, for the Center of Rural Health, the medical school and the university," he said. "We're doing some exciting things in rural health, but it's not just one person, it's an entire team.

"Marshall and the people of West Virginia have made a serious commitment to addressing the health needs of rural areas, and that has created an environment that fosters innovation and allows us to make meaningful progress in solving some tough, long-standing problems for rural people."

This is the third time the NRHA has honored Marshall or MU-affiliated programs. In 1988, it gave the Outstanding Rural Health Program Award to the Dept. of Family and Community Health, and in 1990, it named the Lincoln Primary Care Center the Outstanding Rural Health Practice.

## Mufson named chair emeritus

Dr. Maurice A. Mufson, founding chairman of the Department of Medicine, has left the chairmanship but is continuing his teaching and research duties.

Dr. Mufson has contributed greatly to the school and to his field, said Dr. Charles McKown.

"Marshall was extraordinarily fortunate to have a physician and teacher of Dr. Mufson's caliber to begin its Dept. of Medicine and see it through its formative years and beyond," he said. "He brought instant credibility to a new school, oversaw the development of a strong curriculum in internal medicine, and somehow found time to also make substantial scholarly and research contributions at a national level. We are pleased that he has agreed to continue his research and his work with students and residents even though he is leaving as chair."

In recognition of Dr. Mufson's significant contributions to Marshall, Dr. McKown has named him chair emeritus of the Department of Medicine. Dr. Kevin Yingling, a professor of medicine and director of the internal medicine residency program, will be the acting chair of the department.

Dr. Mufson came to Marshall in July 1976, 18 months before the medical school's first students began their studies. During his tenure as chair, he served as president of the national Association of Professors of Medicine, was elected to mastership in the American College of Physicians, and was chair of the Federated Council of Internal Medicine. He also received a prestigious medical alumni achievement award from the New York University School of Medicine.

Dr. Mufson is well known for his research on infectious diseases. In addition to co-editing the textbook *"Becoming a Clinician,"* he has published more than 190 scientific papers and book chapters. He was chosen as a visiting scientist to the prestigious Karolinska Institute in Sweden.

## MU medical grad receives federal fellowship to work with U.S. DHHS

Paul Ambrose, M.D., a 1995 graduate of the School of Medicine, has been selected for a fellowship in which he will work closely with top officials in the United States Dept. of Health and Human Services.

Dr. Ambrose becomes the seventh Luther Terry Fellow of the Association of Teachers of Preventive Medicine. This senior advisory position is sponsored by the association through a cooperative agreement with the Dept. of Health and Human Services Office of Disease Prevention and Health Promotion. Dr. Ambrose will work closely with senior leadership, including Health and Human Services Secretary Donna Shalala, Surgeon General David Satcher, and Deputy Assistant Secretary for Health Randolph Wykoff.

Previous people in Dr. Ambrose's position have served as the "point person" on multi-agency collaborations addressing such issues as immunizations, healthy lifestyles, medical school curricula, and racial and ethnic disparities in health.

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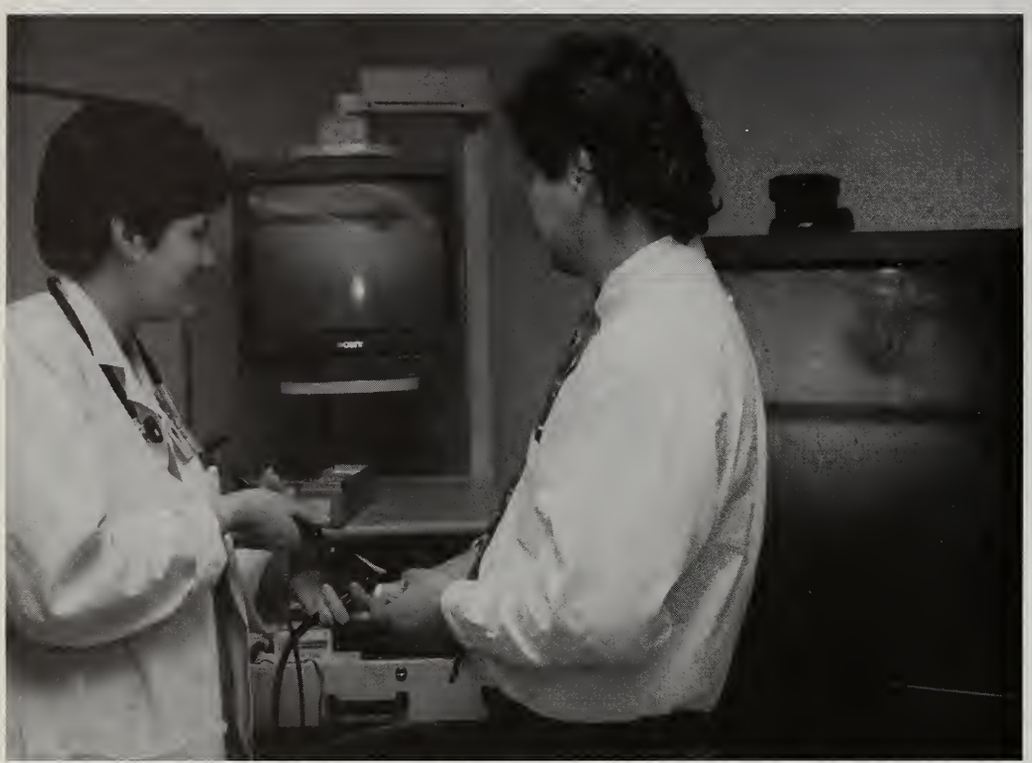
# West Virginia School of Osteopathic Medicine News

## WVSOM establishes OPTI-Link in Logan



**Intern Jessica Carter, D.O., and Chief Resident John Cook, D.O., demonstrate the new OPTI-Link network equipment at Logan General Hospital.**

The West Virginia School of Osteopathic Medicine has used a recent $113,175 supplemental grant from the Health Resources and Services Administration to establish a video site at Logan General Hospital in Logan.

"OPTI-Link" is an interactive video network that broadcasts live feeds to various hospital and clinical sites across the state. The network is necessary because of geographic barriers that exist in West Virginia and the need of primary care physicians in remote, rural areas to access specialists, learn new information, and continue their professional education through CMEs offered on the network.

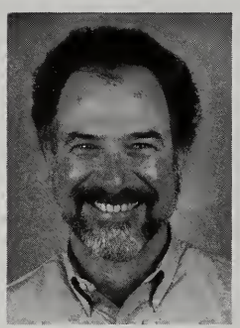
"Primary care physicians practicing in the rural areas of West Virginia can add this video networking tool to their technological arsenal," says Paul Herr, D.O., director of the grant at WVSOM. "Opti-Link allows these rural doctors to communicate with other physicians across the state, allowing for consultation and sharing of medical information."

"Logan was one of the last rural sites in WVSOM's affiliated training program consortium that did not have OPTI-Link capabilities," explains Dr. Herr, professor of Family Medicine. "This grant allowed us to put Logan General Hospital on a level playing field with other state hospitals."

Mike Mills, D.O., director of Medical Education at Logan General, adds that in addition to assisting local physicians, the OPTI-Link network also helps the hospital train its residents, interns and rotating medical students.

"The video network will allow interns and residents to participate in statewide medical education programs," says Dr. Mills, a 1979 graduate of WVSOM. "It's also available to third and fourth-year medical students who are serving rotations at Logan General," he added.

## Hassen named chief technology and information officer



**Hassen**

Arnold Hassen, Ph.D., was recently named Chief Technology and Information Officer at WVSOM.

In his new position, Dr. Hassen will oversee the continued development of technology at WVSOM. "This appointment reflects a commitment to using information technology to enhance the educational and clinical programs at WVSOM," said Dr. Hassen.

"Being situated in a rural community can often be seen as limiting. But in fact, it offers us a unique opportunity to enhance and expand economic development, education and health care through the use of technology. I am looking forward to the challenge," he added.

## Boxwell reappointed to chairman post

**Boxwell**

George Boxwell, D.O., associate professor of family practice, was appointed to his third term as chairman of the Division of Clinical Sciences at WVSOM.

Dr. Boxwell graduated with a bachelor of arts degree from Olivet College in Olivet, Mich., and later earned a doctor of osteopathy degree from the Kirksville College of Osteopathic Medicine in Kirksville, Mo. He was worked as an instructor at WVSOM since 1988.

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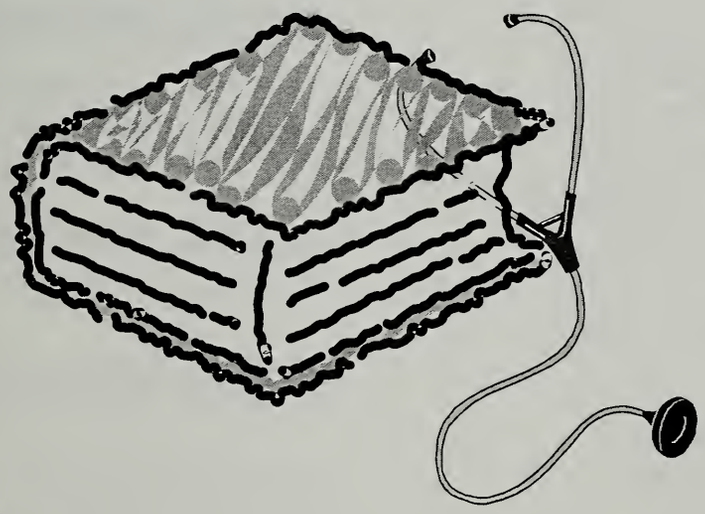

# From one generation of physicians to the next.

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# Alliance . . . More than a yearlong commitment

It has been almost a year since we set goals for the WVSMA Alliance. It is time to retrace footprints we have left behind during this journey together.

I applaud our members for the commitment they have made to their communities. We helped create safer schools for children with our Adopt-A-School programs in Raleigh and Harrison Counties, our SAVE Today proclamation which was signed by Governor Underwood, and the 15 SAVE billboards which were placed across the state. We also participated in walks for breast cancer awareness, networked with the Women's Resource Center in Beckley to help prevent domestic violence, and worked with the Tobacco Control Coalition. I also want to thank the WVSMA for its financial support of our health projects.

I applaud our members for the comitment they have made to the family of medicine. We talked to legislators at the Capitol about issues affecting physicians and their practice of medicine, activated phone banks, and raised funds for medical research and education.

In matters of membership, however, I feel that every physician's spouse should make a commitment to join and be involved with the Alliance. As a group, we can truly make a difference in the lives and health of West Virginians. Indifference will lead us nowhere.

We will soon be holding our 76th Annual Convention, when we exercise healthy decision making for the good of the organization. I hope to see most of you at The Greenbrier, August 24-26.

Finally, I am grateful to the WVSMA Alliance for this opportunity to make friends during my yearlong travels both in and out of our beautiful state; to share talents with my officers and board members; and to work with so many caring and dedicated members. In addition, I commend the efficient and energetic staff at the WVSMA office. Thank you very much for your hard work and friendship.

Rose Romero
President, WVSMA Alliance

# New Members

It is a pleasure to welcome these physicians and residents who have recently joined the WVSMA:

## Boone County

Wenqing Long, MD

## Cabell County

James Goetz, MD
Joan Lynch, MD
Shammon Doctor, MD
Marc Subik, MD

## Central WV

Jeanie Wiest, MD

## Eastern Panhandle

Harry Spalt, MD
Sayeed Ahmed, MD

## Hancock County

Keith Bravo, MD
Sarjit Singh, MD
John Zelis, MD

## Harrison County

William DiFilippo, MD

## Kanawha County

Emily Battle, MD
Claire Marie Calixte, MD
Raymond Coombe, MD
Stephen Elksnis, MD
John Hannah, MD
Marciano Lee, MD
Richard Peterson, MD
David Thomas, MD
Walter Zajac, MD

## Marion County

Stanard Swihart, MD

## Monongalia County

Emilia Dauway, MD
Thomas Lamkin, MD
Susan Lynch, MD
John McKnight, MD
Muzaffar Qazilbash, MD

## Ohio County

Steven Mills, MD

## Parkersburg Academy

Jeffrey Braham, MD
Seyed Ghodsi, MD
Robert Herceg, MD
Christopher Miller, MD
Kenneth Miller, MD
Kim Stooke, MD
Sharileda Vance, MD

## Resident Physicians

Diane Swanson Miller, MD
Susan Garner, MD
Haeley Harman, MD
Michael Hess, MD

# Obituaries

## Bert Bradford Jr., M.D.

Bradford

Charleston surgeon Dr. Bert Bradford Jr., 90, founder and longtime executive director of the CAMC Foundation, died at home on May 29. He died after a melanoma that first struck 2 1/2 years ago recurred.

Dr. Bradford was born in Pennsboro and was a graduate of West Virginia University and the Washington University School of Medicine in St. Louis. After interning and completing his residency at University Hospitals in Cleveland, he entered private practice in Charleston in 1939.

Dr. Bradford served in Europe during World War II, spending five years as chief of surgery at the 45th Evacuation Hospital, earning the Bronze Star and the Legion of Merit. The citation accompanying the Bronze Star noted that Dr. Bradford "efficiently and skillfully organized the hospital's surgical service and developed equipment which aided materially in the rendering of superior medical care and treatment of patients."

As a lieutenant colonel, Dr. Bradford was one of the first Americans to enter Buchenwald concentration camp in April 1945. He came back to Charleston in the fall of 1945 and immediately went to work at what was then Memorial Hospital. He served as director of minor surgery from 1980 through 1996, as director of the department of surgery from 1969-76, and as chief of surgery from 1951-65. In addition, he was an associate professor of surgery at the Robert C. Byrd Health Sciences Center of WVU, Charleston Division.

Dr. Bradford was past normal retirement age in 1976, when CAMC board member Deal Tompkins gave a $5,000 start-up gift and the hospital's CEO Don Arnwine asked Dr. Bradford to head up the new CAMC Foundation. For the next 20 years, Dr. Bradford served as executive director of the foundation, which now has $123 million in assets.

"He was a cornerstone of this institution," said CAMC chief executive Phillip Goodwin. "He was around at its founding, and until his death he was an advocate and cheerleader for this medical center and what it could do."

Barbara Boland, who now runs the foundation added, "He believed in quality health care for the community, and never gave up encouraging other people to support that goal. Dr. Bradford walked CAMC's halls with a brisk pace, maintaining an active life long after his contemporaries had slowed down. He performed surgery into his mid-80s, and continued to see patients on a consulting basis until his illness returned a few months ago."

"I have loved helping people over the years and I feel this has contributed to my good health," Dr. Bradford once told graduating medical students. "Staying active through gardening, fishing, cooking, hunting and tennis has given me great joy. I have found myself much more content in these activities than in driving fancy cars and living in expensive homes. Looking at life's simple gifts often yields the greatest fulfillment."

In 1987, Dr. Bradford received the YMCA's Spirit of the Valley Award for exemplary community service. The CAMC Foundation continues to honor his name through The Bradford Society, made up of individuals who have made planned gifts to the foundation.

Dr. Bradford was preceded in death by his wife, Harriett. Surviving: sons, Bert III of Mocksville, N.C., John of Denver and Dick of Charleston; eight grandchildren; one great grandchild.

*Editor's Note: This obituary was compiled from articles which appeared in The Charleston Gazette and the Charleston Daily Mail.*

## William L. Clairborne, M.D.

Dr. William Leman Clairborne, 85, of Charlton Heights, died December 12 in Montgomery General Hospital after a short illness.

Dr. Clairborne was a native of Fayette County and a graduate of West Virginia University and the Medical College of Virginia. He completed his internship at the C & O Hospital in Huntington. During his career, Dr. Clairborne practiced internal medicine at Laird Memorial Hospital and Montgomery General Hospital, retiring in 1986. He was the physician for C & O Railway, Union Carbide, Alloy and the Fayette County Health Department.

An Army Medical Corps veteran of World War II, Dr. Clairborne had been a member of the WVSMA since 1940 and he was a past president and secretary of the Fayette County Medical Society. He was a member of the Riverview United Methodist Church in Glen Ferris.

Surviving: Julia Kilgore Claiborne; daughter, Anne C. Durbin of Warrenton, Va.; son, Dr. William J. Clairborne of Asheville, N.C.; sister, Eloise C. Keefe of Columbus, Ohio; four grandchildren; one great-grandchild.

## Norris Blaine Groves, M.D.

*Editor's Note: This obituary was written by Dr. Jeffrey B. DeBord, an associate editor of the West Virginia Medical Journal.*

West Virginia's Eastern Panhandle and the entire state lost a great physician, patient advocate and dedicated community servant when Dr. N. Blaine Groves died at age 76 in Martinsburg City Hospital on April 24.

The local newspapers have run several well written accounts of the professional and community service

accomplishments of this Gassaway, W.Va., native, who was known to nearly everyone in the region as "Doc." These descriptions are indeed awe inspiring and accurate reflections of the many pursuits and honors that were near and dear to this man. He was the recipient of the 1999 Berkeley County Citizen of the Year, Distinguished West Virginian Award in 1998, the WVU James McCartney Alumni Award, was Past District Governor of Rotary International, and a member of the County and State Boards of Education — these are just a few of his many accomplishments.

Certainly though, Dr. Groves' passion and most stellar endeavor was the Eastern Panhandle Training Center, which he founded in 1968. The training center has become the premier institution for persons with learning disabilities and Dr. Groves had served continuously on its board of directors since he founded it. During one of his public addresses he stated, "The people of Berkeley County can be proud because a place can be judged by how it treats its handicapped."

The honors he was given during his lifetime and the many service organizations he belonged to, give us a glimpse of the man, but I would like to give you a deeper understanding of this gentleman. Near the end of his busy and full life, Dr. Groves suffered several debilitating and discouraging illnesses that would have crushed a lesser man. However, he continued to think of others and constantly worried about the toll his care was taking on his wife, "Jody."

I got to know him more when I was covering call for his attending internist, Romulo Estigoy, M.D., at the hospital. During those weekend rounds, I was able to gain insight into the Martinsburg community, the hospital, and my colleagues by talking with him — taking a 10-minute break from rounds on a busy weekend often evolved into an hour or longer discussion of varied topics from politics to medical practice to WVU football and basketball. The one thing Doc was never without was an opinion! Steadfast and politically incorrect, Doc never held back, there could be no doubt about his take on any subject.

A couple of years ago, I got the inspiration to send my medical students in to talk with him, I realized that this physician had experiences that these young students might never have the opportunity to learn about in this day and age. It proved to be an excellent learning experience for those students and therapeutic for Doc. He regaled them with stories of the practice of medicine before the intrusion by big government, third-party payers, and mind-boggling technology. He never failed to ask them about their lives, hometowns and future plans; and, despite his concern for the state of medical practice today, always encouraged them to consider small-town practice.

He and I often discussed (lamented) that it takes more than a doctorate to make a physician and how that fact is not reinforced enough to our trainees. I believe that he in his own unforgettable way helped those students to realize that being a physician means more than which drug to prescribe. He also taught them a little physical diagnosis as well, describing the differences between Heberdon's and Bouchard's Nodes by using his own hands as classic examples.

In the final weeks of his life when I was having one of my weekend conversations with him, the subject turned to the death of our patients. I had recently lost a long-term patient unexpectedly, and my present student was also with the patient at her death. This was the first time this student had been involved in the care of a person at the time of death and it had been quite a moving experience for him. Doc related to me, and subsequently to the student, a conversation that had taken place between he and his former office manager. Someone had made reference to how strong and supportive he had been over the many years to the families of his patients when their loved ones passed away. Doc had responded that it was part of his duty to that patient to help the famiily. His office manager, however, stated that what these families or hospital staff didn't see was Dr. Groves returning to the office and sitting down in his chair to cry and reflect in silence for 15 minutes or so at the loss of that person, a patient, a friend — then washing his face and attending to the needs of his other patients. By sharing this story with my student, Dr. Groves had given him a valuable lesson toward becoming a true physician. Dr. Groves had continued his life's work as a teacher and a physician, even unto the end of his days.

All those who knew him will miss Dr. Norris Blaine Groves, but he will continue to enhance the lives of many others through the good works that he leaves behind.

Dr. Groves is survived by his wife, Joan Hardin Groves; three daughters, Deborah Groves of Charlotte, N.C.; Carolyn Groves and Nancy Bowers, both of Martinsburg; a granddaughter, Sara Nicole Bowers; a brother and spouse, Albert and Shirley Groves of Grafton, Ohio; three sisters and spouses, Mary Lou and Dr. W. R. McCune of Martinsburg, Patricia and Guy Stewart of Morgantown, and Eleanor Stedman of Maryland; and two sisters-in-law, Hal M. Ritter of Los Altos, Calif., and Nancy Kittle of Beckley.

Donations may be sent to Eastern Panhandle Training Center, Rt. 6, Box 271, Martinsburg, WV 25401, or Trinity Episcopal Church, 200 W. King St., Martinsburg, WV 25401; or War Memorial Park Pool Fund, c/o Parks and Recreation Board, P. O. Box 1061, Martinsburg, WV

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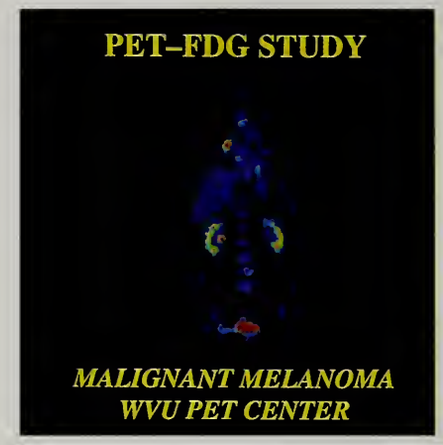


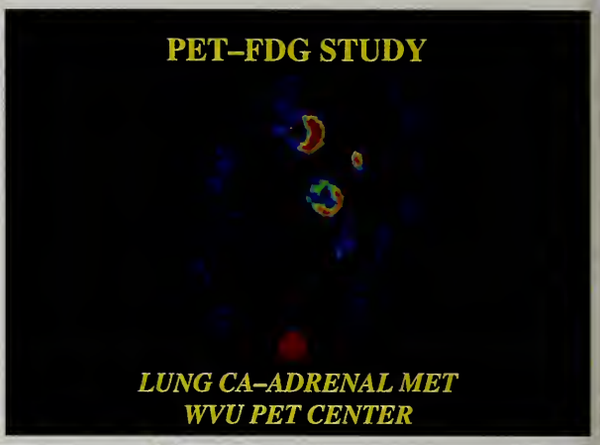


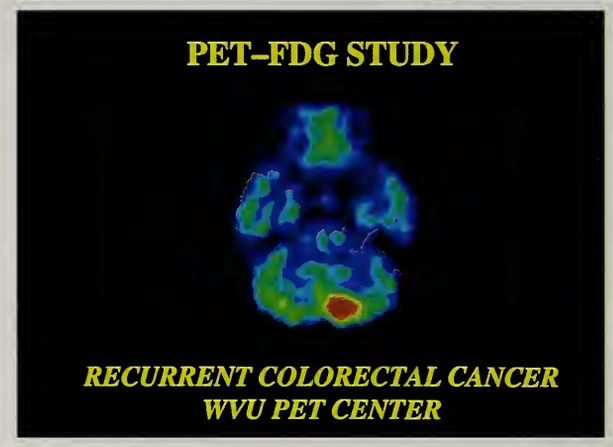


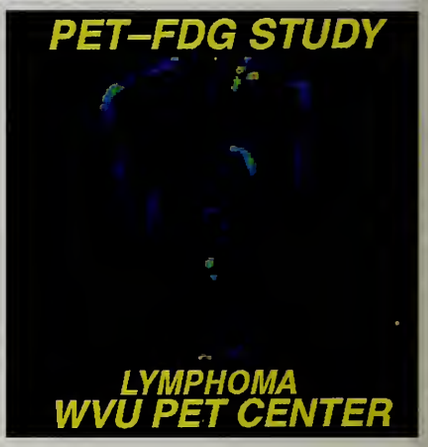


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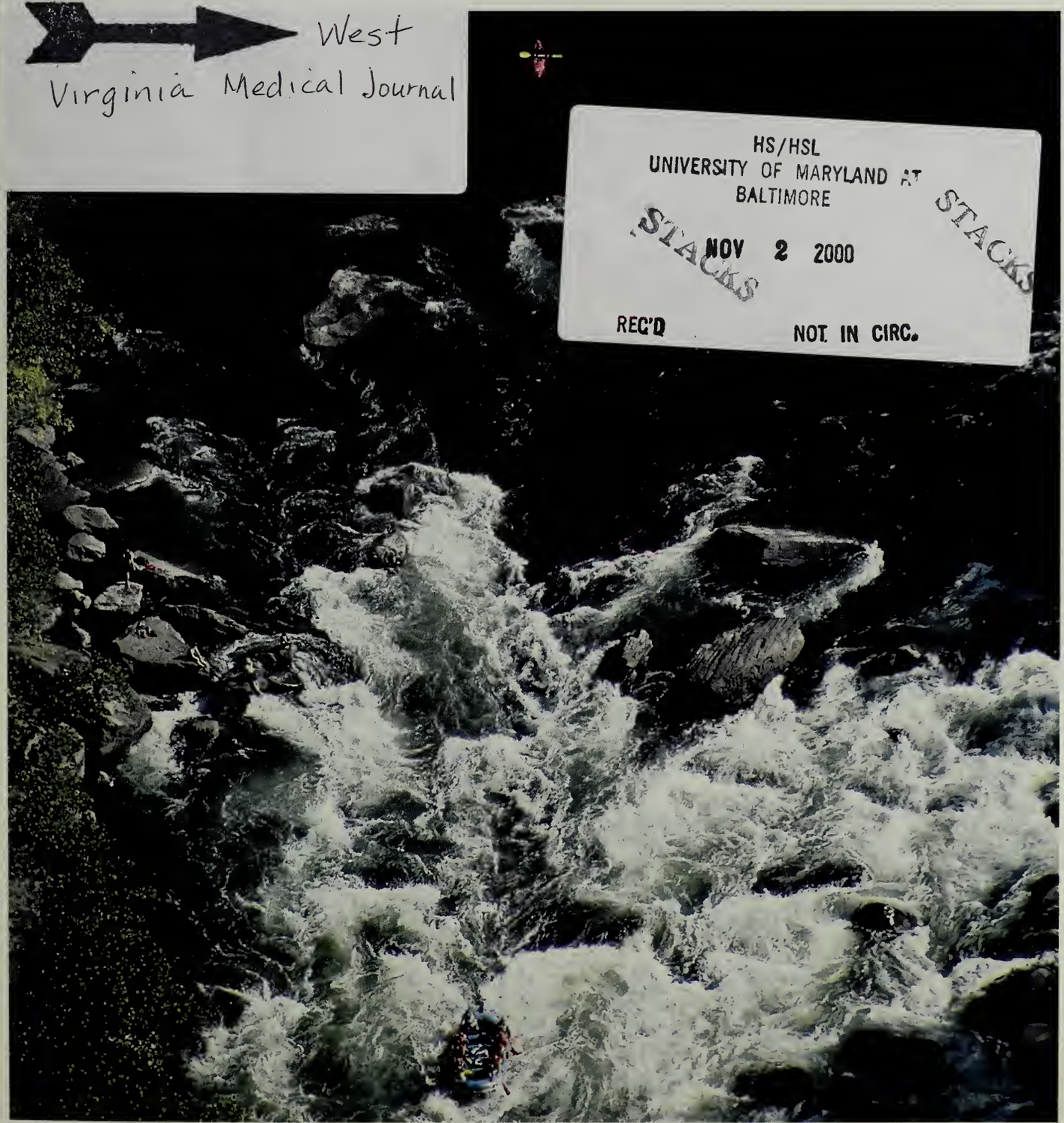

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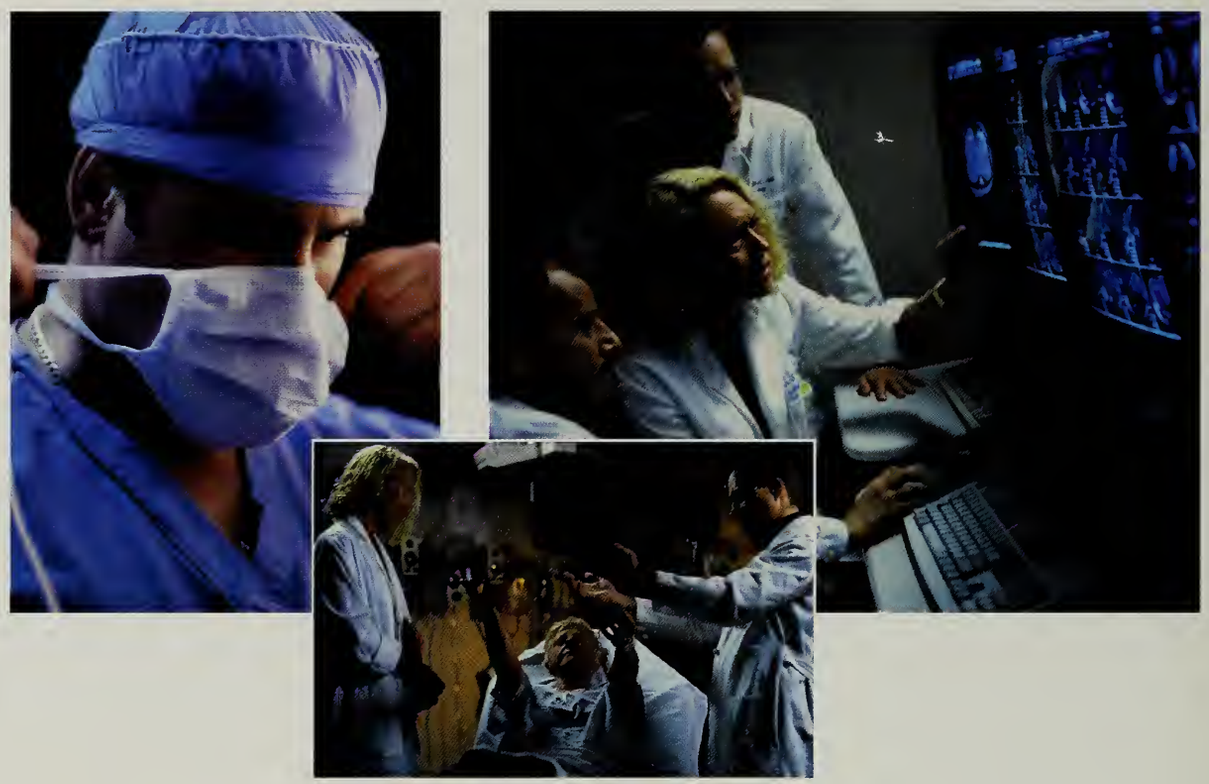

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Camcare Health Education and Research Institute
3211 MacCorkle Ave. SE
*C. Sue Warren, MD*
*Harry L. Reahl, MD*
*Robert Hall, PhD*
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**West Virginia Trauma Symposium**
Jan. 18-19, 2001
Snowshoe, WV
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*David Denning, MD*
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**Cardiology Conference at Snowshoe**
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Snowshoe, WV
*William Carter, MD*
Chairman

## Life Support Training

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Dec. 9-10, 2000
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Dec. 8, 2000
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## Outreach Programs

**Herbal Medicine**
Oct. 25, 2000
12:15 p.m.
Summers County ARH
Hinton, WV
*Shelda Martin, MD*

**Medical Compliance Issues: Hot Topics**
Nov. 1, 2000
12:15 p.m.
Montgomery General Hospital
Montgomery, WV
*M. Jill Griffith*
*CAMC Compliance Officer*

**Diabetes: Update 2000**
Nov. 16, 2000
6 p.m.
Summersville Regional Outreach
Comfort Inn
Summersville, WV
*Peggy Adams, MSN, RN, C, CDE*

## Guest Lectures and Grand Rounds

**Hypertension in the Millennium 2000: Progress and Challenges**
Oct. 25, 2000
8 a.m.
CAMC Memorial Division/WVU
Building, Room 2000
*Daniel Levy, MD*
Harvard School of Medicine
Boston, Mass.

**Non-Small Cell Lung Cancer**
Nov. 20
Noon
CAMC Memorial Division/WVU
Building, Room 2000
*Joseph Treat, MD*
Temple University Cancer Center
Philadelphia, Pa.

Camcare Health Education and Research Institute

MEDICAL JOURNAL
West Virginia State Medical Association

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***On The Cover***

***A section of whitewater on the New River photographed from the New River Gorge Bridge on Bridge Day 1999.***

***Photo by Nancy L. Hill, Managing Editor, WV Medical Journal***

***Graphics Design by Joel Sites, Chapman Printing***

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# Manuscript Guidelines

All articles for the *West Virginia Medical Journal* must be submitted on an IBM compatible disk. Microsoft Word 97 is preferred, but other languages are acceptable. If the manuscript contains tables, the main body of the manuscript and references should be saved as one item, i.e., *article*, and then each table should also be saved as a separate item, i.e., *Table 1, Table 2.*

All scientific manuscripts should be prepared in accordance with *"Uniform Requirements for Manuscripts Submitted to Biomedical Journals."* Papers will not be considered for publication if they have already been published or are described in a manuscript submitted or accepted for publication elsewhere. All persons designated as authors should have participated enough in the work to take public responsibility for the concept.

Manuscripts should be accompanied by one extra copy, be double-spaced, have each page numbered and should include a title page, an abstract of no more than 150 words, and references numbered consecutively. No more than 10 references will be published and then a statement will appear that the author should be contacted for the other references listed in the manuscript.

Tables, figures and photos should be numbered, and indicated with parentheses whenever they are mentioned in the text, i.e. (Table 1), (Figure 1). Legends should be included for all figures and photographs.

Photos must be unmounted glossy prints in a 5 x 7 format or smaller. Black and white photos are preferred. Cost of printing photos in excess of four will be billed to the author at a cost of $13 for each photo. Each photo should have a label pasted on its back indicating its number, the author's name and an indication of its "top." Do not write on the back of photos, scratch or mar them with paper clips. Drawings and charts should be created in black and white.

All scientific material is reviewed by the editor and three other members of the Publication Committee. Special articles or reports are usually only reviewed by the editor. All articles should be addressed to:

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If you have questions or need more information, phone Nancy L. Hill, managing editor at (304) 925-0342.

# Editorial

# A picture is worth a thousand words

I was going to discuss prescription drug costs this month, but the cartoon below appeared in *The Charleston Gazette* on Oct. 4 and I decided to give my space to it. There will be plenty of time to discuss prescription drugs later and the current political season will be over in just a couple of weeks.

This cartoon depicts the essence of the 2nd District congressional race better than several pages of text could. At the end of September, Mr. Humphreys had reputedly spent $5 million of his own money *(asbestos settlement funds)* on this campaign. Mrs. Capito, by contrast, had raised approximately $1 million in contributions by that same date. Both parties' National Congressional Committees are also heavily involved. This has to be the most expensive congressional campaign in state history.

This is the first election cycle that this seat has been open since 1982. Regardless of who wins the White House, health care legislation will be at the forefront during the next Congress. Mrs. Capito has proven herself to be knowledgeable in this area and has voted responsibly on health care related legislation during her four years in the WV Legislature.

The cartoonist Russ Wallace, aka Dr. Scott Henson, was recently featured in the *Sunday Gazette Mail* on Sept. 17. His is a fascinating tale.

He is a native of Charleston, a graduate of Hurricane High School and WV Tech, and a 1985 graduate of the Marshall University School of Medicine. He completed a residency in neurosurgery at the University of Virginia in 1994 and a fellowship at George Washington from 1994-95. He then assumed a faculty position as director of cranial base surgery at Albany Medical College.

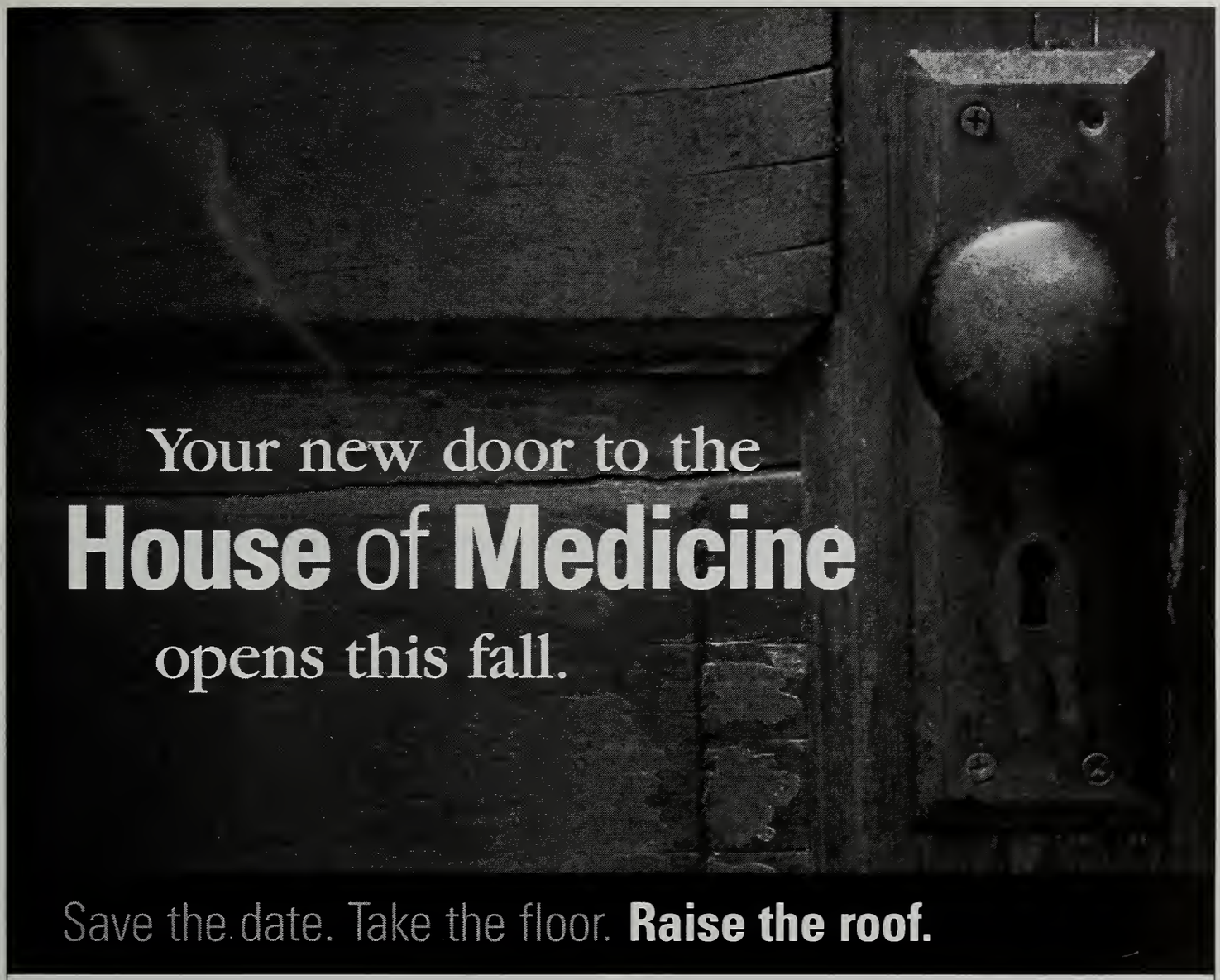
Shortly after completing his residency, Dr. Henson developed a debilitating cardiomyopathy which severely restricted his ability to practice neurosurgery. He moved back to WV and began to look for a less strenuous career. He had always drawn and had illustrated his own journal articles.

He began drawing editorial cartoons for the *Charleston Gazette* a little over a year ago. Recently, he began a daily nationally syndicated single panel cartoon called *"Natural Selection"* which can be found on the comic page. His pen name is taken from Alfred Russell Wallace, a contemporary of Charles Darwin's who failed to publish his own theory of evolution. He is the son of Dr. Sam Henson who practiced in Hurricane for many years and now limits his practice to house calls.

To learn more about Russ Wallace, check the Sept. 17 article at http://sundaygazettemail.com/news/News/2000091633/ or you may contact him personally at fudnog@aol.com

I hope this cartoon has piqued your interest in things political. Please check the WESGRAM for the WESPAC endorsements, contribute to the candidates of your choice and WESPAC within your ability. Above all else, please exercise your right to vote on November 7th.

F. Thomas Sporck, M.D., F.A.C.S.

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# Highlights of the Healthcare Summit 2000

*The Greenbrier*
*August 24-27, 2000*

**Inaugural Address**

# The Medical Profession in West Virginia: Pride and Responsibility

I will be talking about pride a great deal today and that is because I have so much to be proud of. From the standpoint of a leadership position of a professional organization in West Virginia, I can think of no greater source of pride than to be president of the West Virginia State Medical Association. This is a terrific honor because this Association is composed of such highly skilled, talented and compassionate members.

As I talk of my sources of pride, as is the case with most of you, my greatest pride is my family. All of you know them, but I ask my wife, Sherry, and boys, Dan and Jess to rise. I want to express to you not just my pride, but my love and support.

I now ask the members of the Ohio County Medical Society and its Alliance to please rise. Although it may sound provincial, I challenge anyone to find a county medical society of its size, not just in West Virginia but anywhere, that has achieved the accomplishments of this medical society and its Alliance consistently year after year.

It takes three things to have a strong county society. It takes dedicated physician leadership assembling all physicians willing to overlook divisive issues to work together for a greater good of the local medical community and community at large. It takes a hardworking and enthusiastic Alliance with great ideas willing to carry out the program of the society. Finally, it takes an executive director who understands and respects physicians and their good work while having a bulldog approach to completing projects that allows a medical society to foster good relationships in the community. We have one in Linda Elliott.

I have been the recipient of a great deal of your professional and personal support. I would not be standing here today if it was not for your support. I appreciate what you do and am proud to be a part of you.

**Dr. John D. Holloway is sworn in as the new president of the WVSMA by Dr. Phillip Stevens, who served as president of the WVSMA during the past year.**

I have been asked many times why I have become so involved with organized medicine. There are a number of reasons. By far and away, the best part of my involvement is the many friends that I have made with physicians throughout the state and throughout this country. Many of you are here today and I want to express my appreciation also to you for your support of me. Knowing how good all of you are is one of the reasons I am so proud of this organization.

I do want to remember two physicians who are no longer with us, Harry Weeks and Steve Ward. They took me under their wing from the time I was contemplating a career in medicine through my years of the practice of medicine and certainly during my climb up the ladder of organized medicine. Although it may sound presumptuous, I think they would have been very proud to see me wearing this medal. If they were still with us today, the days leading up to this meeting might have been much easier for me because they probably would have insisted on even writing this speech for me.

There is talk about pride in our profession when our profession is seriously threatened in West Virginia. For years, physicians have faced unique sets of occurrences from both the public and private sector that have made West Virginia a state that is a hostile place to practice medicine, especially compared to our neighboring states. Among other things, we have had to pay a highly discriminatory 2% provider tax on our gross income to fund Medicaid, a tax that exists no where else in the nation.

Now, we face a grave crisis due to our skyrocketing and outrageous liability premiums as well as our significant risks of being sued and facing huge jury verdicts. Outside of my office window lies the Ohio River and beyond that is the State of Ohio. If I move my practice on the other side of the Ohio River less that one mile away, I would reduce my practice costs by thousands of dollars. I know of two specialists who just left Wheeling to practice on the other side of the Ohio River from Wheeling to save themselves tens of thousands of dollars -- and this was before they received their liability premium notices for 2001. A physician in Wheeling was notified that his liability premium will rise from $98,000 to $166,000. He has announced that he is moving to Michigan. Family physicians are seeing their premiums rise by 100%. With the inability to pass on these additional costs, some physicians cannot afford to practice in West Virginia.

I need not remind you of how much more likely doctors are to face a lawsuit as well as lose a case with a huge verdict in West Virginia as compared to any of our neighboring states.

How many other physicians will cross the Ohio River from Wheeling? How many will leave our other border areas such as Parkersburg, Huntington, Bluefield, Martinsburg and Morgantown? How many will leave from anywhere in West Virginia and go far beyond its borders? As a result, how many jobs will be lost? How many hospitals on the brink of insolvency might now go under? How can we recruit new physicians to West Virginia when they are deeply in debt from their education expenses and face these types of practice expenses before they can make their first dollar?

Specialists who face that highest risk of being sued and the highest insurance premiums are the ones most likely to leave the state and will be the hardest to replace. No primary care physician will be able to afford to practice in our rural areas. Many of us who practice in West Virginia do so because we are originally from the state. Some of us went to medical school here. Some of us did our postgraduate training here. We want to remain here because there are many attractive aspects of living in West Virginia and raising a family, but if the price of practicing in West Virginia becomes too great, physicians will leave.

There are many reasons to be proud of our profession in West Virginia. While gaps in health care exist especially in the rural areas, there are multiple centers of medical excellence throughout the state. There are excellent medical schools and residency training programs. The health profession is the biggest source of employment in the state. In order to attract other businesses to the state, it is necessary to have strong hospitals and other health care facilities with good physicians to man them to care for their employees. West Virginia has a large percentage of the elderly who appreciate the ability to receive high quality medical care in-state and do not have the means to be able to leave the state for this care.

The physician practice climate has been negatively impacted on mostly by the Legislature and the courts. They must understand this impact and the need to work with us to provide a favorable climate to attract physicians to West Virginia and not drive them away.

The West Virginia Legislature has a dominant role in affecting our practice climate. Their job is a difficult one in managing a huge number of issues involving multiple constituencies in a relatively brief annual session while facing difficult budget problems. Due to our small numbers, it almost appears that physicians are taken for granted and not felt to be a political threat. I really do

**Dr. Holloway happily posed with his wife, Sherry, and their sons, Jesse and Dan, after his inauguration during the WVSMA's Healthcare Summit 2000 at The Greenbrier.**

not think that they understand that the present climate is forcing physicians to leave the state which will have a devastating impact on West Virginia. They should be proud of what we provide to the state both in health terms as well as economic terms and make it one of their major responsibilities to make this a positive climate for physicians to practice.

It makes no sense that physicians are taxed for providing good health care when tobacco is either undertaxed in the case of cigarettes or not taxed at all in the case of smokeless tobacco. This Legislature needs to understand that physicians cannot practice in a state where they must pay huge liability premiums and where they face the risk of losing all personal assets due to a poor patient outcome that is not the fault of the physician.

The biggest threat that physicians face today in West Virginia comes from work of plaintiff attorneys in some of our county circuit courts and as well as rulings from the State Supreme Court. There are several ironies from the effect that the legal system in West Virginia is having on the medical profession. Attorneys who specialize in lawsuits say that, if physicians regulate themselves, there would be no need for lawsuits. The irony is that it is not unusual for a physician who faces a sanction or loss of privilege or their medical license, that they hire the very attorneys who tend to sue doctors to prevent or delay the action taken against this physician. If physicians were allowed to regulate themselves unimpeded by the impositions of the legal system, those physicians who we know ought not be practicing would not be practicing.

It has been said that the fear of being sued makes physicians practice better medicine. The irony is that our pro-lawsuit climate is making physicians leave the state which undermines health care in West Virginia. It is not the responsibility of the legal profession to tell the physicians how to practice medicine. We physicians do have pride in our work and our profession. We accept the responsibility to make sure that we deliver high quality care. We accept responsibility for our mistakes. We do not accept the responsibility for adverse outcomes that are not our fault. Some lawyers look at medical decision making as either completely right or completely wrong. Science and human behavior are too uncertain to be looked at in those terms.

Our anxiety is even greater as we wait for the WV Supreme Court of Appeals to review the cap on non-economic damages. One of the arguments that has been proposed on why the cap should be abolished is that doctors are not special so they should not have special protection. It is true that doctors are not special. Doctors have the same hopes, dreams and fears that other people do. What is special is the work that physicians do.

Physicians have remarkable abilities to improve the health of an individual that sometimes requires complicated medical care or procedures. This type of work does carry risk. Physicians do need special protection from the risk of performing these procedures from adverse outcomes that are not their fault. Because physicians are normal people, if they face too much personal risk, they will limit their practice or not practice at all.

It is easy to understand from all of this why our physicians are discouraged and why some might leave the state. I do recognize how bright and talented all of you are as are physicians throughout this state. These are not problems that I or a few of us can solve. I am very optimistic of what we can accomplish by using all of our resources working together through this Association and our Alliance.

Right now, I could not be prouder of the West Virginia State Medical Association because of our accomplishments this past year under the leadership of Dr. Phillip Stevens and because of the terrific meeting we have had this weekend. A meeting of this magnitude demonstrates the dedication, cooperation and hard work of the staff of our Association. I want to extend to them our appreciation for the success of this meeting.

Brent Mulgrew from Ohio State Medical Association reminded us when Evan Jenkins has been telling us that the status quo for an organization like ours is not acceptable. We must demonstrate to our members and to all physicians that they can get something in return by paying their membership dues.

The Association is in the strongest position that it has been in years. Our Legislative Committee under the chairmanship of Dr. Gene Cordell has been meeting regularly all summer so that our agenda will be available long before the start of the next legislative session to greatly increase our chances of success. Over 80 physicians have volunteered to work on seven subcommittees of this committee. Our agenda will be supported by our knowledgeable and hardworking lobbyists.

We have had very productive discussions with the Insurance Commissioner Hanley Clark to develop a prompt payment bill to our liking that can be passed in the Legislature. Beyond this, we actively will work with him to also develop a uniform credentialing system for physicians and a meaningful Patient's Bill of Rights.

**After his address, Dr. Holloway shares a laugh with his good friends, Dr. Constantino Amores, Dr. James Comerci and Dr. Michael Fortunato and his wife, Kathy.**

In order to be a strong advocate for physicians, our Association needs to be strong financially. Thanks to the work of Evan Jenkins with great cooperation from his staff, we have achieved significant improvement in our financial picture. Our Audit Committee as defined in our Bylaws will be reinstated to be chaired by the Vice President Dr. Douglas McKinney. It will be this committee's responsibility to ensure that we develop specific policies regarding Association expenditures, adhere to a balanced budget, and increase our financial reserves.

I am very proud of the leadership role that the Association has achieved in the area of public health. One of the strongest areas of state government is the Bureau of Public Health under Commissioner Dr. Henry Taylor. We have developed a close working relationship with the Bureau to deal with West Virginia's considerable public health problems, especially tobacco use.

The Association will serve as a lead agency for a $40,000 grant from the WV Bureau for Public Health to address the issue of smoking and pregnancy in a joint initiative with the West Virginia Hospital Association. We are applying for other grants to deal with the epidemic of tobacco use as well as other public health initiatives in WV. Dr. Taylor told us that he has only one patient whom he described as being a hypertensive, overweight, out-of-shape smoker with heart disease.

Does that sound like a familiar patient to many of us? His patient is the State of West Virginia. To emphasize our responsibility and commitment to the area of public health in caring for this patient, we will form a new Committee on Public Health Initiatives.

The Insurance Committee of this Association will be reinstated. It is to be a membership benefit to help address physicians' questions, concerns and their practices in dealing with insurance companies. It will also address physician relationships with the liability insurance carriers in WV to make sure the physicians receive the best coverage and protection without price gouging. Other roles of the committee will be as to explore alternative mechanisms for dispute resolutions to malpractice lawsuits. This committee will also examine mechanisms that can allow physicians to pass on the cost of our huge increases in liability premiums.

Before the end of this year, the physicians of WV should receive a settlement of over $3,000,000 from the Blue Cross/Blue Shield organization. This works out to be approximately 50¢ on the dollar for physicians' claims from this insurance company's bankruptcy. This settlement on long overdue payments is occuring only due to very effective and very expensive work by the WVSMA that benefits all physicians in WV.

We will address proactively consumer concerns regarding physicians and medical errors. We are presently working with the Board of Medicine on physician profiling to provide consumers with good information on physicians and their practices so that consumers may make informed decisions when they choose a physician.

Dr. Alan Nelson gave us an excellent talk on medical errors and we should follow his suggestions. We will not argue about the numbers of errors. We will work on reducing them. The West Virginia Medical Institute has expressed a willingness to work with us on this issue so that we can use systems to determine the major causes of these errors and to improve our practices to reduce medical errors as much as humanly possible.

We must address the two biggest obstacles to the economic viability of physicians practicing in West Virginia, namely the provider tax and our liability problems. Let me give you an example of how physicians can influence legislation and an example of how physicians can influence an election.

In the last legislative session, the two delegates from Ohio County consistently stated they would vote against our bill to tax smokeless tobacco. This was not surprising because there was strong opposition to this tax from the vending machine companies as well as convenience stores. More importantly, in Wheeling there is a factory that produces smokeless tobacco. Our physicians had regular meetings with our delegates to explain our position regarding this particular tax and why they should support it. I was quite proud that due to our efforts, our delegates from Ohio County reversed their stand and voted in favor of a tax on smokeless tobacco.

Although the bill died in the Senate, this was a testimony to the ability of physicians to influence legislative votes. The influence on these delegates did not come from one or two meetings from one or two physicians. The good relationship with our delegates is due to the year-round contact we have with them. Last legislative session, we were so close in abolishing the provider tax. If the physicians throughout the state, and many of you already do, developed and maintained the strong contacts with their local legislators, this can be accomplished. The abolishment of the provider tax will continue to be one of our top legislative priorities.

**Linda Elliott, the executive director of the Ohio County Medical Society, was very proud to congratulate Dr. Holloway at the reception which the Ohio County Medical Society hosted in his honor and in honor of the other new officers of the WVSMA and WVSMAA.**

Let me tell you the other story of power of physicians to produce change. Most of you are familiar with the threats the physicians in the Northern Panhandle faced with a Circuit Court judge who was heavily biased against physicians producing judgments devastating our medical community. This judge was up for re-election in the primary election last spring. We were told he was a shoo-in running against a relatively unknown attorney with strong physician backing. You know what happened. This judge not only lost this election, but he was crushed. The physicians of the Northern Panhandle, with financial support from some of you, led to the defeat of this judge and a victory for the medical profession of the Northern Panhandle and all of WV.

This election victory was not easy. It came about through significant financial contributions from physicians to our candidate. It took significant time from physicians talking to their patients and campaigning for our candidate. It also took coalition building with other groups led by our Alliance so that we were not alone in this election fight. These three ingredients brought us a significant victory.

Dr. Randy Smoak, president of the AMA, reminded us that we are a sleeping giant. This victory for physicians in this Circuit Court judicial race shows what can happen when this giant is awakened. This victory has received a lot of attention statewide as we have often heard this weekend.

To bring about a favorable change in all three branches of government, physicians will need to work together using the same three ingredients; time, money and coalition building. It takes time to talk to legislators, business leaders and our patients. It takes money . . . lots of money . . . the system works on money to bring about change. We must have significant WESPAC contributions beside individual candidate contributions. It takes coalition building first among physicians which was one of the major goals of this meeting beginning with our retreat on Thursday. From here, we need to bring all physicians to be working together for our common goals. We need to work with representatives of all health care workers representing over 100,000 West Virginians that far outnumber coal miners, teachers and certainly lawyers. By doing this, we can repeat statewide what we did in the Northern Panhandle.

Delegate Shelly Capito mentioned our effectiveness at White Coat Day at the Legislature last session when 40 doctors appeared. The next White Coat Day is Tuesday, Feb. 20, 2001. Forty doctors are not nearly enough. We need to have 400, 1,000, even 2,000 doctors appear. We need to show up with thousands of other health care workers. This can be another display of our power in order to pass our legislative agenda.

By using the untapped power physicians have working together through this Association, I truly believe that we improve the practice climate of West Virginia to make it an attractive place for physicians to practice which would greatly benefit West Virginia. This will be my message as I have the privilege to visit you in your communities this coming year.

As physicians, we have many responsibilities to our profession, our communities, our families and ourselves. No matter what we face, we must never forget that our greatest responsibility is to provide the best possible care to our patients regardless of their ability to pay. We must continue to accept our responsibility not to allow substandard care from any of our colleagues. Father Sobus reminded us that the practice of medicine is a healing ministry, that we listen to our patients, build rapport with them, show them that we care, and yes, even pray with them.

For all of the good reasons there are to practice medicine, the best reason is our interaction with our patients. At times, patient expectations and demands are excessive. However, there is no profession that I know of that achieves the overwhelming sense of gratitude and respect that we do with our patients. This is the basis for my pride when I place the initials M.D. after my signature.

As a final demonstration of my feelings for the medical profession, I will address my sons, Dan and Jess. No matter what you do in life, I hope that you achieve the same sense of pride and satisfaction that I have as being a physician. Let me go further to say that nothing would make me prouder than if either one of you or both of you were to become physicians.

I thank you again for the honor to serve as your President as well as your support and especially your friendship. God bless you.

# Presidential Address: Phillip R. Stevens, M.D.

**Dr. Phillip R. Stevens, who served as president of the WVSMA during the past year, officially kicked off the Healthcare Summit 2000 by presenting welcoming remarks and delivering his presidential address.**

Good morning! Welcome to the FIRST Annual Health Care Summit of the WVSMA. We are going to have a great time and this is going to be a terrific meeting, I promise.

We have put together a marvelous program with shakers and movers from all aspects of health care. From governmental programs to organized medicine, to public health, to university research, to political campaigns, to the judicial system, and to a great rock & roll band. We have got it all this year. If you can't find something to stimulate you at this meeting, then you are dead. I want to welcome everyone who is here and a special welcome to Brent Mulgrew and the Ohio State Medical Association.

As I stand before you this morning, I am astounded that I have only two days left of my presidency, 48 short hours. My parents always warned me that as you get older time goes by quicker. But this is ridiculous! It seems like only yesterday, or maybe last week, that I stood before you delivering my acceptance speech.

I want to thank you all again for the tremendous honor of leading this wonderful organization. I have truly enjoyed this past year, long hours, long nights, hard work and all. I want to thank all of the staff at WVSMA, in particular Evan Jenkins. I know I don't need to tell you all this, but we have a terrific staff and they work very hard for us. I want to thank all of the physician leaders for their efforts this past year. It is a thankless job, but one that is becoming more important all the time. I have a tremendous amount of respect for all of you.

I want to thank Rose Romero and the Alliance. They do invaluable work and a lot of it. We all worked very hard this past year. I believe that we have got our organization whipped into great shape, and I am very excited about the future.

But, much work remains to be done. The House of Medicine is being assaulted on many fronts. We are not treated fairly by the insurance industry. We are not treated fairly the government, and we are certainly not treated fairly by the lawsuit lawyers. To fight all these battles, we simply have to get stronger. We can get stronger. We must get stronger. We will get stronger.

I am not going to rest until every physician in this state is a member of the WVSMA, and I need your help to do this. We must convince all our brothers and sisters in medicine that joining the Medical Association is the right thing to do. And you know what? It is the right thing to do!!!

As individual physicians, we help our individual patients, but as members of organized medicine, we help our fellow citizens, we help our communities, we help our state and we help our country.

This past year, I learned a great deal about how our government really works and it's not pretty! There are two things you really don't want to watch being made -- legislation and sausage. In WV, there are six people who really run the show and one of them is really not the governor. The six people who really run WV are the president of the Senate, the speaker of the House, the chairman of the Finance Committee and the chairman of the Judicial committee, in both the House and Senate.

These six people can kill any bill they want and any one of them can frequently accomplish this alone. It takes a tremendous amount of political power to get any one of them to do something they really don't want to do. We simply don't have that power — YET. The teachers union has it. The lawsuit lawyers for sure have it. Look at all the plaintiff lawyers in our government. But, we don't have the power — YET.

I want to convince all physicians to become more politically astute, and I really feel that this falls into the category of being a good citizen. As I become more politically astute, it dawned on me that I was really not a

very good citizen, and the vast majority of doctors, I'm afraid, aren't really very good citizens either. Don't get me wrong, physicians are great citizens in most categories — we work hard, we provide a very valuable service to society, we pay taxes, we raise wonderful families, but as far as forming government policy, our influence is way too small.

In the past, physicians were much more prominent in government. A large percentage of the signers of the Declaration of Independence were physicians. Physicians were prominent players in the founding of this great nation, and up until the early 1900s, there were many physicians — legislators, on both the state and national level.

What has happened to us? We have dropped off the face of the earth. We have NO physician serving in the Legislature in Charleston, and there are very few in Washington, D.C. But, to be fair, most groups are in the same boat. There are not very many citizen-legislators left. They have all been replaced with lawyer-legislators. And I really don't think that is a good thing. Over 90% of the U.S. senators are lawyers! That is amazing! I have really given a lot of thought as to why this has happened.

On our side of the equation, it is a lot harder to be a physician now. Back then, in the 1920s, there were no antibiotics, only a handful of medicines, very few surgical procedures and keeping up with the medical literature must have been a piece of cake compared to what we have now.

On the other side of the equation, our government has grown far larger and far more complex. So complex that the average citizen really doesn't have a clue, how their government really works. But, the lawyers know. Law schools require many courses on political science. Lawyers receive excellent training on the mechanics and inner workings of our government. They also understand how the system can be manipulated to their benefit.

The last time the average citizen was taught anything about government was in their 8th grade civics class. They learned a very rudimentary overview of the three branches of government: executive, legislative and judicial. If you were like me, the class was taught by a teacher who preferred to be called coach. If the lawyers don't have an inordinate amount of influence in government already, the lawsuit lawyers are creating a fourth branch of government all by themselves.

How many of you saw the article in *TIME* magazine entitled *"Are lawyers running America?"* Their lawsuits are setting policy on guns, tobacco and now HMOs. Who elected them? Who indeed? Trial lawyers are using litigation to hijack hot-button social issues that should be resolved in Congress and state legislatures by representatives elected by the people.

Walter Olson is the author of a book that I highly recommend titled the *"Litigation Explosion."* **Mr. Olson states that in fact *"Trial lawyers are an unelected fourth branch of government."*** Mississippi trial lawyer Dickie Scraggs who has made tens of billions of dollars with tobacco lawsuits does not deny that lawsuit lawyers are trying to run America. He just laughs and says, "Somebody's got to do it." I don't know about you, but I can't think of any group I would rather have run the country less than the lawsuit lawyers.

How did we get into this mess? Walton Olson's book does an excellent job explaining this. Our current tort system is vastly different from English common law, which is where we started. In the late 1930s, President Roosevelt appointed the Clarke Commission. This was a group of Harvard lawyers who wanted to change our tort system. Change it, they did.

FDR powered the proposals through Congress and they eventually became laws. They did three things.

**At the reception sponsored by the WVU School of Medicine and the Marshall University Joan C. Edwards School of Medicine, Dr. Phillip Stevens and his wife, Susan, enjoyed visiting with Rose Romero, who served as president of the WVSMA Alliance during the past year.**

They made charging a contingency fee legal. Prior to that, charging a contingency fee would land you in jail and that is the way it still is in most other countries. They got rid of the "loser pays" statute. Prior to that, if you filed a lawsuit against someone and you lost, you had to pay that person's legal fees! And they made class action lawsuits legal. Now, lawyers could file lawsuits for whole groups of people who don't even know that they are involved in a lawsuit.

By doing these three things, they unleased a tidal wave of lawsuits that threatens to drown us all. They did not intend to create a fourth branch of government, but they did. A group of self-appointed policymakers who feel that they know what is best for America. I feel, that this so-called fourth branch of government in reality constitutes a very grave threat to democracy itself. The only place where these policy decisions should be made is in the people's house, the legislative branch of our democracy by representatives elected by the people.

So, it is time for all physicians to become complete citizens, citizens well informed about the legislative process, engaged in that process and active in that process. We must fight them in the courtroom, we must fight them in the State Capitol, we must fight them in political campaigns. We must fight them wherever they want to fight. But, fight them WE MUST!

This next year, I am going to be working hard to increase membership and to increase our political power. A very large part of political power is our political action committee, WESPAC. The key to success is to develop a good game plan and then fund it well. I feel we have developed a good game plan and we have organized an excellent team. Now, it is the time to fund it well.

This year, I want to find 200 physicians who will join me in giving $1,000 a year to WESPAC. I believe that the return on that investment would be far greater in real dollars than the 10%-15% that we get in our pension plans. I am serious, I really mean that. There is a physician group in Wheeling who has decided to move across the river to Ohio. They estimate that they can reduce their office overhead by $40,000 a year just by locating outside WV. Think of the money your practice could save if we got rid of the provider tax, passed the prompt payment bill and enacted some meaningful tort reform just to name a few.One thousand dollars a year is nothing compared to the savings we would realize.

Evan Jenkins states that you can practice the politics of access or the politics of influence. With the politics of access, you give a little money to every candidate for office, covering all your bases. Then, after the election, they will listen politely to what you have to say and then ignore you completely and do what they want. The politics of access gets you NOWHERE. Or, you can play the politics of influence.

With the politics of influence, you target an enemy and then fund his opponent with a lot of money, and you defeat your enemy and throw him out of office. The next election cycle you do the same thing. Now, the number one goal of most politicians is to get re-elected. So nobody wants to be the next enemy in line. It is amazing how everyone starts coming around to your way of thinking. But, the politics of influence costs more. It takes money to get good people elected. But you know what? I am tired of getting my butt kicked year after year. I am ready, willing and able to play the politics of influence and I am confident I can find 200 physicians, hopefully many of you are in the room right now, who are ready to invest in good government with me.

On this date in 1944, Paris was liberated from the Nazis. In spite of Hitler's order to burn the city to the ground, resistance was light and the city surrendered. Free French divisions marched into Paris followed by the United States Fourth Infantry Division. The next day, French General Charles De Gaulle led a joyous celebration down the Champs d'Elysees.

Hopefully, one day soon we too can have our own joyous celebration when the House of Medicine is liberated.

THANK YOU AND GOD BLESS!

**MARK YOUR CALENDAR NOW!**

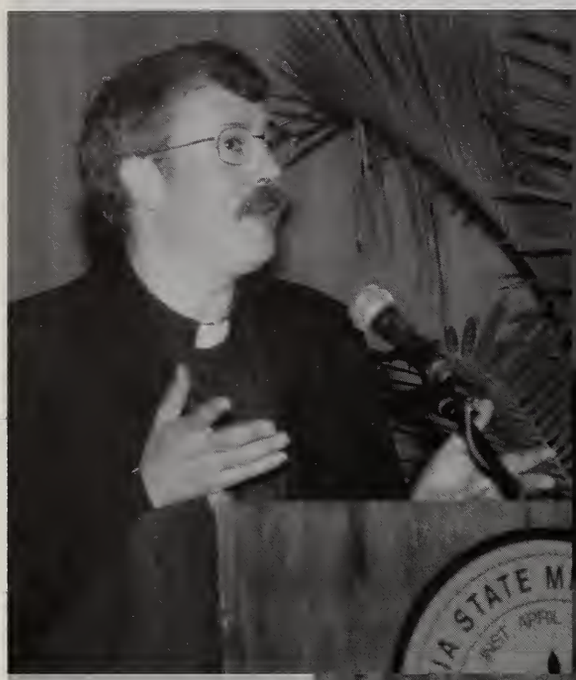
# WVSMA's Mid-Winter Clinical Conference & Business Meeting

## The Homestead
## Hot Springs, Va.
## March 1-4

*Call the WVSMA at (304) 925-0342 for more details!*

***(Top l-r)*** **Governor Cecil Underwood, Representative Bob Wise and Delegate Shelley Moore Capito were the political candidates who presented their views at the WVSMA's Healthcare Summit 2000.** ***(Center left)*** **The Honorable Elliott "Spike" Maynard, chief justice of the WV Supreme Court of Appeals, discussed the future of the courts in WV.** ***(Center right)*** **This year's T. L. Harris Address was delivered by Dr. Thomas Spelsberg of the Mayo Clinic who presented a fascinating lecture on** ***"Gene Therapy and the Human Genome."***

*(Top left)* AMA President Dr. Randolph Smoak addressed the participants at the Lunch & Learn on *"Effective Physician Advocacy on Tobacco Issues and Settlement Allocation."* *(Top right)* Dr. Henry Taylor, commissioner of the WV Bureau for Public Health, stresses a point during his lecture on *"Medicine and Public Health Opportunities Through Healthy People 2010."* *(Center left)* Lisa Dodrill and her daughter, Paige, share a special moment at the dance. Lisa and her husband, T. Kirk Dodrill, were exhibitors at the meeting. *(Center right)* Diana Sole, president of MotionMasters, described how physicians can strengthen their presentation skills. *(Bottom left)* Dr. Thomas Houston, director of Science & Public Health Advocacy Programs for the AMA, was a guest speaker for the Lunch & Learn focusing on tobacco issues. *(Bottom right)* Dr. Phillip Stevens was delighted to visit with his friend, Olivia, at Friday evening's reception. Olivia is the daughter of Dr. Jerry Day and Jane Luscombe of Huntington.



***(Top left)*** **Father James Sobus of Wheeling presented a moving lecture entitled *"Practicing the Ministry of Medicine in Our Litigious Cultural Milieu."* *(Top center)* Elizabeth Lawton, commissioner of the Bureau for Medical Services, was one of the speakers for a session dealing with healthcare financing issues in WV. *(Top right)* WV Insurance Commissioner Hanley Clark discussed *"Managed Care in West Virginia."* *(Center)* Michael McCarthy, assistant dean for information technology and medical informatics at Marshall University, lead a session on Internet exploration. *(Bottom left)* Dr. Alan Nelson, a special advisor to the ACP-ASIM, delivered this year's Edmund B. Flink address on *"Physicians Responding to the Medical Error Controversy."* *(Bottom right)* Guests enjoyed dancing to the rock and roll tunes of Phil Dirt and the Dozers.**

*(Top left)* The volleyball tournament was a popular sporting event at this year's meeting. *(Top right)* Dr. Jeffrey Stead, chairman of the golf tournament, swings into action. *(Center left)* Dr. Alva Deardorff was one of the players in the tennis tournament. *(Center)* Beckley physicians Drs. Joe Romero, Pros Gogo, Ramon Jereza and Bert Maramba teamed up for the golf tournament. *(Bottom)* Betty Kuppusami, the new president of the WVSMA Alliance, and Dr. Ron Stollings greet each other at the reception honoring the new officers of the WVSMA and WVSMAA.

WEST VIRGINIA STATE MEDICAL ASSOCIATION
INST. APRIL 10, 1867

Special Report

# Pain management for end-of-life care

**VAKAS A. SIAL, M.D.**
*Resident, Dept. of Internal Medicine, West Virginia University School of Medicine, Morgantown*

**ALVIN H. MOSS, M.D.**
*Director, Center for Health Ethics and Law, West Virginia University, Morgantown*

***Editor's Note: This article is the second of a series on the subject of end-of-life care in West Virginia. If you would like more information about this subject, please contact the West Virginia Initiative to Improve End-of-Life Care at www.wvinitiative.org or toll free at 1-877-209-8086.***

When patients think about care at the end-of-life, one of their major concerns is that they will die in pain. Medical research documents that these concerns of patients are justified and that many, if not most patients, die without excellent pain control.

In fact, there is such a growing concern about pain management for patients at the end of life in this country that the Pain Relief Promotion Act, H.R. 2260, is currently under consideration by Congress (1). Two of the findings from this act are as follows:

*"Inadequate treatment of pain, especially for chronic diseases and conditions, irreversible diseases such as cancer, and end-of-life care, is a serious health problem affecting hundreds of thousands of patients every year."*

*"The dispensing or distribution of certain controlled substances for the purposes of relieving pain and discomfort even if it increases the risk of death is a legitimate medical purpose and is permissible under the Controlled Substances Act."*

Why is pain untreated? The literature suggests that physicians have undertreated pain mainly as a result of these three factors:

(1) A lack of education about pain assessment and management;

(2) Concerns regarding scrutiny by regulatory agencies and licensing boards; and

(3) Inappropriate avoidance of prescribing opioids for fear that patients will become addicted.

In West Virginia, people are so concerned about pain management at the end of life that in a telephone survey of 1,095 residents, 63 percent stated they were worried about being in pain when they die (2). In addition, in a series of community dialogues, focus groups, and senior citizen center meetings, the West Virginia Initiative to Improve End-of-Life Care learned that improvement of pain control was the top priority of citizen participants to enhance end-of-life care in our state. As a result of these discussions, the WV Initiative to Improve End-of-Life Care has recommended that its first priority be to *"Give patients adequate pain control* (3)."

West Virginia physicians are candid in admitting that pain management at the end of life needs to be improved. In a recent survey of physicians in the state and other health care professionals, 54 percent of those responding rated EOL care as only fair to poor. Fifty-nine percent of physicians reported having received one week or less of formal training in palliative medicine. The majority reported being less than satisfied with their pain management skills (4).

To help address the issue of pain relief, the Joint Commission on Accreditation of Health Care Organizations recently announced the development and approval of standards that create new expectations for the assessment and management of pain in accredited health care organizations. These standards are included in the 2000-2001 standards manuals and feature establishing *Pain as the Fifth Vital Sign*. They are available at www.jcaho.org or by calling 1-630-792-5000.

## Medical aspects of pain management

### Pain assessment

For pain to be treated well, it needs to be properly assessed. Pain has been defined as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage (5)." It is both a somatic and a psychic experience, a physical and affective sensation experienced according to the person's capacity to control it effectively and to ascribe a meaning to it (6).

Since pain is a subjective feeling that depends on the patient's perspective, it can be initially assessed by taking a detailed history with an indepth pain history including pain intensity and character. Past efforts to treat pain should be reviewed and adverse effects to medications should also be documented.

It is necessary to determine what makes the pain better and worse, and the quality of the pain should be evaluated, as well as the location of the pain and if there is radiation. In addition, patients needs to be asked if the

pain is constant or intermittent. While pain is subjective, it can be quantified (6).

The recommended approach to pain assessment by the Agency for Health Care Policy and Research is summarized by this mnemonic "ABCDE" (7).

**A-** *Ask* about pain regularly. *Assess* pain systematically.

**B-** *Believe* the patient and family in their reports of pain and what relieves it.

**C-** *Choose* pain control options appropriate for the patient, family and setting.

**D-** *Deliver* interventions in a timely, logical, and coordinated fashion.

**E-** *Empower* patients and their families. *Enable* them to control their course to the greatest extent possible.

The American Pain Society (APS) performed a consensus study to develop quality guidelines on the assessment and management of pain. They recommended that members of the health care team record a measure of pain intensity in a way that makes it highly visible and facilitates regular review. They proposed that pain be recorded as the fifth vital sign on a pain scale kept at the patient's bedside as part of the graphic record along with pulse, BP, temperature, and respiration. Each clinical unit should select a simple, valid measure of intensity. The most widely used is a 0 to 10 numerical scale with 0 equaling "no pain at all" and 10 equaling "worst possible pain." A scale consisting of the words none, slight, moderate, severe, and excruciating can also be used (8).

In assessing pain, patients should be asked whether they have had pain during the past 24 hours. If they have, they should be asked to evaluate the following:

1. Current pain intensity;
2. Intensity of the worst pain experienced in the past 24 hours;
3. Effects of pain on sleep and functionining;
4. Satisfaction with responsiveness of the staff to his/her reports of pain;
5. Satisfaction with relief provided;
6. If there is persistent pain despite treatment, whether he/she would like more intensive analgesic treatment, and if not, the reasons why;
7. The maximum time he/she waited after a request for additional pain medication or for a change in regimen;
8. Adequacy of instructions regarding the pain treatment plan; and
9. Reasons for any need to contact their physician or nurse and ability to contact them when needed (8).

With this information, physicians will have an accurate gauge of a patient's daily pain and can act accordingly. Just as a physician would respond to an elevated temperature reading, he/she should respond to a pain intensity of 5 or more on the pain scale with a change in pain medication.

### Pain management

After pain is adequately assessed, it can be managed. The World Health Organization recommends that pain be treated "by the ladder, by the clock and by the mouth (9)."

"By the ladder" refers to a stepwise approach to pain control with Step 1 medication being for mild to moderate pain that the patient rates as 1 to 4 on a 10-point scale. This is a non-steroidal anti-inflammatory drug (NSAID) or acetaminophen. When pain persists or if the patient initially rates the pain as 5 to 6 on a 10-point scale, a Step 2 medication is needed. Medications such as codeine or hydrocodone in combination with acetaminophen should be used. Also, an adjuvant medication can be added. Adjuvant analgesic drugs may be usefully added at any stage. An adjuvant analgesic is a drug whose primary indication is other than pain, but it has an analgesic effect in some painful conditions. Examples are corticosteroids, NSAIDS, tricyclic antidepressants, anticonvulsants, and some antiarrythmic drugs (10).

If pain still persists or if the patient initially rates the pain as 7 to 10, then a Step 3 medication for moderate to severe pain can be added or started along with further adjuvant and non-opioid pain medications until the patient is free from pain. Step 3 medications include morphine, hydromorphone, oxycodone, and methadone.

"By the clock" refers to the need for analgesic to be given on an around the clock basis, NOT prn, with additional doses as needed for breakthrough pain to maintain constant control of pain and to prevent recurrences of severe pain (7). Over 80% of cancer pain can be controlled with the use of inexpensive drugs that can be self-administered by mouth at regular intervals (10). Hence "by the mouth" refers to an analgesic being administered by the mouth whenever possible. If an oral route is not possible, alternative routes such as rectal and transdermal should be considered. It is important to remember is that adequate pain control should be tailored to each patient's pain with attention to detail, since there is variation in pain in every individual.

Respiratory depression is potentially the most serious adverse effect of treating severe pain with opioids. When respiratory depression occurs, it usually does so in patients who have not been previously treated with opioids, and it occurs in association with other signs of central nervous system depression such as somnolence, confusion, and slowed respiration. In "opioid-naïve" patients, respiratory depression can be avoided by starting with a low dose of opioid and titrating the dose upwards based on the patient's pain.

## Ethical and legal aspects

Some physicians have ethical and legal concerns that hinder their adequate treatment of pain in dying patients. Despite evidence to the contrary, some physicians may fear that the use of opioids will lead to addiction. The medical literature suggests "that medical use of opioids, rarely, if ever, leads to drug abuse or iatrogenic opioid addiction (11)."

West Virginia law provides immunity to physicians who prescribe opioids ("pain-relieving controlled substances") to alleviate the intractable pain of dying patients. The WV Management of Intractable Pain Act states "that in a case of intractable pain involving a dying patient, the physician discharges his/her professional obligation to relieve the dying patient's intractable pain and promote the dignity and autonomy of the dying patient, even though the dosage exceeds the average dosage of a pain-relieving controlled substance (12)." Also, by law, West Virginia's medical doctors have a professional obligation to control the pain of dying patients under the American Medical Association's Code of Medical Ethics (13) which is applicable to all physicians licensed by the WV Board of Medicine. Accordingly, undertreatment of pain in this circumstance is a possible ground for professional discipline by the WV Board of Medicine.

Evaluation and treatment of pain is not only legally but also ethically required. It has been asserted that there is a constitutional right to palliative care. As Pellegrino states, "Not to relieve pain optimally is tantamount to legal malpractice . . . indeed so unequivocal was their assertion [the U.S. Supreme Court] of the obligation to relieve pain and suffering that is has been interpreted as a putative 'constitutional right' to palliative care (14)." Similarly, the World Health Organization has stated that "freedom from pain should be seen as the right of every cancer patient (9)." There is no good reason why this right should not apply to all patients.

## Conclusion

In summary, control of pain at the end of life is what patients want. They have ethical and legal grounds to expect to receive it. The medications, knowledge, and skills to adequately control patients' pain at the end of life are available to all West Virginia physicians.

Further information for physicians and the public about pain management at the end of life is available from the WV Initiative to Improve End-of-Life care at www.wvinitiative.org or call toll free at 1-877-209-8086.

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# Your practice and the Internet

**Q. I am interested in developing a website for my practice. Are there any guidelines that I can follow to help reduce liability risks?**

A: As the Internet evolves, an increasing number of physicians are gaining confidence in it as a way to communicate with patients. With so many physicians online, there's been an explosion in the number of practice-related websites.

Practice-related websites offer patients and visitors a number of benefits including immediate access to general information such as: maps and directions to the office, answers to frequently asked questions, practice policies regarding care, accepted managed care plans, and even new patient information packets. However, risk management experts suggest physicians be aware of the liabiity risks when putting a practice "online."

Potential liability risks may include:

- Visitors to the site who use information to self-treat or self-diagnose without seeing a medical professional.
- Visitors to the site who perceive a physician-patient relationship has been established.
- Patients sending sensitive information through the site.

If you are currently operating or considering developing a practice-related website, Medical Assurance's Risk Resource suggests you:

- Include a disclaimer to the effect that you are not responsible or liable — directly or indirectly — for any form of damages resulting from the use or misuse of information contained in or implied by the site.
- Include a disclaimer to the effect that no physician-patient relationship exists by virtue of visiting the site.
- Carefully review all "links" to your site before agreeing to place them on your site.

In addition, the AMA's guidelines for health care-related websites can be found at the following site: http://pubs.ama-assn.org/ama web.html.

Physicians insured by Medical Assurance, the WVSMA's endorsed medical professional liability carrier, may contact the company's Risk Resource Center for prompt answers to physician website liability questions by calling (800) 282-6242 or via e-mail at rmhelp@maih.com.

## Are WV juries out of control?

The escalating frequency and severity of medical malpractice awards in West Virginia continues to be a cause of concern to experts who say the litigation environment is causing some physicians to limit their practice or leave the state altogether. The major malpractice carriers writing in the state have received double-digit rate increases in response to these frightening trends.

During the first half of the year, Medical Assurance's insureds were hit with over $4.4 million in losses — $3.1 million in the second quarter alone. With four months left in the year, medical and legal experts warn that this crisis shows no signs of slowing.

In trying to determine the reasons for these outrageous verdicts, MA can see no correlation between the awards and the presented damages in some cases. In addition, juries have routinely returned awards above and beyond amounts suggested by plaintiff's counsel during trial.

MA's executives have assured the WVSMA's leadership that they remain committed to a strong defense for all insureds within the state, and have even enhanced the coverage package they offer (*see article below*). If you would like more information, call Steve Brown at (800) 331-6298 or 346-8228 in Charleston.

## MA expands coverages

Medical Assurance's hallmark has always been the aggressive defense of non-meritorius claims. Many companies claim they take similiar positions, but now MA is the first malpractice insurer in the nation to back up its defense philosophy with an extra million dollars of coverage strictly for cases that go to trial and conclude with a jury verdict. Called "Contingency Excess," this coverage is available at no charge and applies to all new and renewal policies on or after August 1, 2000.

To discuss the Contingency Excess coverage, call (800) 331-6298 or 346-8228 in Charleston.

# Fetal echocardiography at West Virginia University: A seven-year experience

**SUSAN LYNCH, M.D.**
*Assistant Professor, Dept. of Pediatrics, Section of Neonatology, West Virginia University School of Medicine, Morgantown*

**PEGGY MCLAUGHLIN, L.P.N., M.D.**
*Pediatric Cardiovascular Ultrasound Technician, Dept. of Pediatrics, Section of Pediatric Cardiology, West Virginia University School of Medicine, Morgantown*

**ARPY BALIAN, M.D.**
*Associate Professor, Dept. of Pediatrics, Section of Pediatric Cardiology, West Virginia University School of Medicine, Morgantown*

**LEE PYLES, M.D.**
*Associate Professor, University of Minnesota, Dept. of Pediatrics, Section of Pediatric Cardiology; Clinical Associate Professor, Dept. of Pediatrics, Section of Pediatric Cardiology, West Virginia University School of Medicine, Morgantown*

**MILLARD SIMMONS, M.D.**
*Professor and Director of Perinatology, Dept. of Obstetrics and Gynecology, West Virginia University School of Medicine, Morgantown*

**STAN EINZIG, M.D., PH.D.**
*Professor and Chief of the Section of Pediatric Cardiology, Dept. of Pediatrics, West Virginia University School of Medicine, Morgantown*

## Abstract

***The last decade has seen tremendous growth and utilization of fetal echocardiography. In order to assess the indications and yield of fetal echocardiography at West Virginia University, all fetal echocardiograms performed during a seven-year period were reviewed. There were 931 fetal echocardiograms peformed on 803 women during this time period and there was a large increase in referral rate as has been seen in other regions. The highest yield of abnormalities was seen in fetuses referred secondary to the finding of an abnormal fetal cardiac exam on routine screening ultrasound (55.6%), or fetal anomalies of other organs (8.2%). These two indications alone were responsible for 77.8% of identified cases of congenital heart disease by fetal echocardiography during this time period. The resultant findings highlight the need for thorough obstetrical screening ultrasound, including the four chamber view of the heart.***

## Introduction

Fetal echocardiography is an increasingly utilized diagnostic test which provides obstetricians and pediatricians valuable information on the structure and function of the growing fetal heart.

When the fetal echocardiograph is normal, this information provides reassurance to parents of fetuses at increased risk for congenital heart disease (CHD). When abnormalities are identified prenatally, fetal echocardiography may affect the management of the pregnancy by altering delivery time, transplacental medical management, or change in the site of delivery.

Certain maternal and/or fetal risk factors are indications for referral to fetal echocardiography. Maternal indications include maternal or familial congenital heart disease, teratogen exposure, and maternal illnesses including diabetes mellitus, systemic lupus erythematosis, or phenylketonuria (PKU). Fetal risk factors include extracardiac malformations, chromosomal abnormalities, fetal arrhythmias, and hydops fetalis. Additionally, a major reason for referral for fetal echocardiography is the suspicion of congenital heart disease during routine fetal ultrasound. These conditions put the fetus at increased risk for the presence of congenital heart disease, although the degree of risk varies between these indications (1,2). Ductus arteriosus constriction has been associated with the use of indomethacin as a tocolytic agent for pre-term labor (3). Fetal echocardiography is employed during indomethacin use to screen for this side effect.

## Methods

We reviewed all fetal echocardiograms performed between January 1990 and January 1997 at West Virginia University Hospital. Our purpose was to determine both the reason for referral for fetal echocardiography and the outcome to determine the diagnostic yield in our population and to compare these with those reported in the literature.

Exams were performed using the Hewlett-Packard Ultrasound 1500 or 2500 model, with 2.5 or 5.0 MHZ transducers. The fetal heart was examined in the four chamber, long-axis, short-axis, and aortic arch views. Fetal gestational age ranged from 16 weeks to 40 weeks, with a mean gestational age of 27.6 weeks. The majority (75%) were performed between 22 and 32 weeks gestation regardless of the reason for referral.

**Table 1. The Eight Major Indications for Referral for Fetal Echocardiography at WVU Hospital from Jan. 1990 - Jan. 1997.**

| Indication | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | Totals Echos/Patients |
|---|---|---|---|---|---|---|---|---|
| Family History CHD | 10 | 31 | 19 | 17 | 21 | 25 | 42 | 172/165 |
| Arrhythmia | 11 | 14 | 24 | 34 | 22 | 42 | 34 | 196 /181 |
| Extracardiac Anomaly | 5 | 7 | 15 | 17 | 8 | 28 | 42 | 132/122 |
| Suspected CHD on Screening US | 9 | 3 | 3 | 6 | 1 | 8 | 15 | 50/45 |
| Maternal IDDM | 19 | 19 | 26 | 27 | 23 | 34 | 42 | 205/190 |
| Teratogen Exposure | 0 | 4 | 4 | 9 | 4 | 9 | 14 | 44/44 |
| Maternal Indomethacin | 0 | 0 | 7 | 12 | 1 | 9 | 11 | 115/40 |
| Miscellaneous | 0 | 2 | 7 | 6 | 1 | 0 | 0 | 17/16 |
| Totals per year | 54 | 80 | 105 | 128 | 81 | 155 | 200 | 931/803 |

Only 6% of the exams were performed at less than 22 weeks. The reason for referral and any abnormal findings were recorded. Abnormal findings were collected in the following categories: structural heart disease, the presence of fetal arrhythmia, and abnormalities of fetal blood flow.

During the seven-year period, 931 fetal echocardiograms performed on 803 women. Of the 803 mothers, there were nine mothers with twins, and one mother with triplets. Data regarding all aspects of perinatal and neonatal care and outcome were available through chart review.

## Results

Indications for referral for fetal echocardiography fall into eight major categories ( Table 1). This table also reflects the increasing number of fetuses referred for echocardiography during these seven years at WVU.

For each of the eight major categories, significant findings are listed in Table 2. Also shown is the average gestational age at exam for each category. At West Virginia University, the recommended gestational age for referral, when possible, is 22 to 28 weeks.

The most common indication for referral was maternal insulin-dependent diabetes mellitus, comprising 22% of the exams. The average fetal gestational age at exam was 25 weeks. There were 132 exams performed on 122 women. The following abnormalities were seen. Five cases of structural heart disease were diagnosed for a yield of 2.6%. These included three fetuses with ventricular septal defects, one with Tetrology of Fallot, and one with complex congenital heart disease. Additional abnormalities included one fetus with a small pericardial effusion, one with myocardial tumors, and one with right heart enlargement without further structural abnormalities. Four fetuses (2.1%) were found to have septal hypertrophy. This latter finding was first seen in fetuses at 24-33 weeks gestational age.

The second most common reason for fetal echocardiography was fetal dysrhythmia, comprising 21% of exams. Such referral usually results from an auscultated fetal arrhythmia during routine prenatal visits. A severe arrhythmia was found in 15 fetuses (8.3%). Structural heart disease was seen in three fetuses (1.7%). This included one apical muscular ventricular septal defect, one endocardial cushion defect, and one fetus with Ebstein's anomaly of the tricuspid valve.

Fetal echocardiography was performed in 19% of the exams due to referral because of a family history of congenital heart disease. Two cases of structural heart disease were identified for a yield of 1.2%. These included one fetus with interrupted aortic arch with a ventricular septal defect, and one fetus with a ventricular septal defect. The index case for both of these fetuses was a sibling with congenital heart disease, as was the case in 72% of exams in this category. In 9.6% of the cases, the family member with CHD was the mother and in 2.4% the father. The reason for referral was stated only as family history of CHD in 8.5% of cases without further description as to which family member.

The fourth most common reason for referral (14.2%) for fetal echocardiography was the finding of an extracardiac anomaly in the fetus which put the fetus at increased risk for CHD. This included cases such as suspected or known trisomies, hydrocephalus, and abdominal abnormalities. Ten cases of structural heart disease were identified in this category for a yield of 8.2%.

Accounting for 12.3% of referrals was the administration of indomethacin tocolysis for pre-term labor. The major known fetal side effect of this medication is constriction of the fetal ductus arteriosus (3). There were 115 fetal echocardiograms performed on 40 women receiving indomethacin.

**Table 2. Significant findings of the 931 fetal echocardiograms performed at WVU Hospital from Jan. 1990 - Jan. 1997.**

| Indication | Aver. Age of Fetus | Structural Heart Dis. Cases/Yield | Significant Fetal Arrhy. (Group 2) | Duct. Constriction Uniq. to Group 7 | Sep. Hypertrophy Uniq. to Group 5 |
|---|---|---|---|---|---|
| Family History CHD | 24.8 wks. | 2/1.2% | ---- | ---- | ---- |
| Arrhythmia | 28.9 wks. | 3/1.7% | *15 severe arrhy./8.3% | ---- | ---- |
| Extracardiac Anomaly | 27.6 wks. | 10/8.2% | ---- | ---- | ---- |
| Susp. CHD on Screen. US | 28 wks. | 25/55.6% | ---- | ---- | ---- |
| Maternal IDDM | 25.2 wks. | 5/2.6% | ---- | ---- | 4/2.1% |
| Teratogen Exposure | 26.7 wks. | 0/0 | ---- | ---- | ---- |
| Maternal Indomethacin | 27.3 wks. | 0/0 | ---- | 70% showed eventual constr. 30% no constr. | ---- |
| Miscellaneous | 26 wks. | 0/0 | ---- | ---- | ---- |

The primary focus was surveillance for ductal constriction every few days while mothers were receiving this medication. There were no fetuses at baseline exam with the incidental finding of structural heart disease. Twenty of the 40 mothers remained on the medication long enough to require at least two ultrasounds. Seventeen of these 24 patients had fetuses that eventually showed signs of ductus arteriosus constriction, with the average gestational age at constriction 29.2 weeks. The average final gestational age in the seven fetuses without signs of constriction was 24.7 weeks. Four fetuses showed evidence of ductal constriction on the first exam.

The next most common referral group was suspected fetal congenital heart disease from routine obstetrical ultrasound scans. Twenty-five cases of structural heart disease were found in 40 fetuses referred for this reason for a yield of 55.6%. Average gestational age at exam was 28 weeks. This group had, by far, the highest yield among the referral groups for detection of structural heart disease by fetal echocardiography.

Maternal exposure to teratogens accounted for referral of 44 patients; there were no findings of structural heart disease or other cardiac abnormalities seen on exam. Of these mothers, 68% were referred due to anti-epileptic use, while 13.6% were referred because of lithium use.

The remaining 16 fetuses were referred for fetal echocardiography for various reasons. No abnormalities were found.

There were no false positive exams and two false negative exams. One infant with Tetralogy of Fallot in a diabetic mother was not recognized on two fetal echocardiograms, both of which were listed as suboptimal due to fetal positioning. The second false negative was a case of pulmonary stenosis. In error, one fetus was diagnosed prenatally with right ventricular hypoplasia. After birth this was found to be left ventricular hypoplasia.

## Discussion

There were 45 cases of structural heart disease identified by fetal echocardiography for an overall yield of 5.6%. Different reasons for referral led to highly varying rates of yield. Some categories yielded rates near or below the predicted rate in the general population (0.8%). These included family history of CHD, teratogen exposure, and arrhythmias. Very high yields were discovered in categories such as extracardiac anomalies and suspected CHD on screening ultrasound. This is similiar to yields reported in other studies (4-7). Recognized limitations of fetal echocardiography include the detection of small ventricular septal defects and coarctation of the aorta due to fetal blood flow patterns. Factors such as maternal size and fetal positioning can, at times, effect the echocardiogram (8).

In infants of diabetic mothers, structural heart disease was seen in 2.6% of the cases. Reports in the literature for this population range from 1.2% to 8%. The rates of structural heart disease in this population is thought to be related to maternal glucose control. The finding of septal hypertrophy in this population has been reported as

high as 30%, however this was found in fetal echocardiographs done at 30 weeks or later. The majority of our exams were done in the late second trimester, perhaps contributing to the finding of septal hypertrophy in our population of only 2.1%. This finding of septal hypertrophy is usually benign and resolves in the first year of life (9).

Our results showing a sustained fetal arrhythmia rate of 8.3% are similiar to reports in the literature. Sixty-six percent of all infants referred for this reason were found during echocardiographic exam to have some irregularity of rate or rhythm, however, the vast majority were isolated ectopic beats which usually are benign and resolve before or shortly after delivery. Fetal echocardiography is a non-invasive tool for determining the type and severity of fetal arrhythmia. It also provides information on fetal decompensation such as cardiac hypertrophy, pericardial effusions, or pleural effusions. The incidence of structural heart disease in this population had previously been reported as high as 10%, however recent reports are similiar to our finding of 1.7% (10,11).

Congenital heart disease in fetuses referred because of family history of congenital heart disease was very low. Reports in the literature vary widely, with more recent data showing incidences similiar to our finding of 1.2%. The rate in the general population is 0.8% (12).

Our yield for structural heart disease was quite high and similiar to other studies in fetuses referred due to an extracardiac anomaly or chromosomal abnormality (8.2%). Additionally, when a cardiac anomaly was suspected from a screening obstetrical ultrasound, the yield for structural heart disease was 55.6%. This is in accordance with other studies (3-5). These two categories of referral alone accounted for 35 of the 45 (77.8%) cases of structural heart disease identified by fetal echocardiology and highlight the need to continue to improve the quality of cardiac views on routine obstetrical ultrasound.

Referrals for fetal echocardiography due to indomethicin tocolysis are unique to perinatal centers where it can be carefully employed. Later, gestational age vs. earlier gestational age seemed to correlate with a higher rate of ductus arteriosus constriction. This has been reported previously (3).

## Conclusion

In summary, our findings were quite similiar to other recently published populations. All studies reflect a much higher yield for fetal indications, especially suspected cardiac disease by routine ultrasound, than family or maternal indications for fetal echocardiography.

Our study emphasizes the importance of careful evaluation of the fetal heart including the four-chamber view on routine obstetrical ultrasound so serious cardiac disease can be detected early and patients referred for fetal echocardiography.

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# Helicobacter pylori serology and the diagnosis of H. pylori infection in children

**YORAM ELITSUR, M.D.**
*Dept. of Pediatrics, Division of Gastroenterology, Marshall University Joan C. Edwards School of Medicine, Huntington*

**RAFAH AFLAK, M.D.**
*Dept. of Pediatrics, Division of Gastroenterology, Marshall University Joan C. Edwards School of Medicine, Huntington*

**CHERYL NEACE**
*Dept. of Pediatrics, Division of Gastroenterology, Marshall University Joan C. Edwards School of Medicine, Huntington*

**W. E. TRIEST, M.D.**
*Dept. of Pathology, Marshall University Joan C. Edwards School of Medicine, Huntington*

## Abstract

***Serological screening accuracy rate may be dependent on clinical and pathological determinants. The aim of this study was to evaluate the accuracy of Hp serology test (Roche Biomedical Lab., Labcorp), in the diagnosis of Hp infection in 121 children who were seen in the Pediatric Gastoenterology Clinic at the Marshall University Joan C. Edwards School of Medicine in Huntington. Positive serology detected children with Hp-associated gastritis with a sensitivity of 51.6%. Positive serology significantly correlated with the degree of gastric inflammation and density of Hp organisms in the gastric mucosa (ANOVA p < 0.001). The Labcorp. Hp-ELISA test had a poor accuracy rate for the detection of Hp-gastritis in children. Gastric biopsies should always be performed to establish the diagnosis of Hp infection in children.***

## Introduction

*Helicobacter pylori* (HP) has been recognized as the major etiological factor resulting in peptic ulcer disease in adults and children (1,2). A commonly available enzyme-linked immunosorbent assay (ELISA) is a common non-invasive method used to detect *Hp* infection (3,4).

Serological testing for *Hp* has the potential of being a cost-effective method, particularly by sparing the endoscopic procedure (5-10). Since the immune response to *Hp* organisms is dependent on various mucusal and systemic factors, i.e. antigenic load and host immune compentence, it is critical to investigate the correlation between serology test result, gastric inflammation and/or the density of *Hp* organisms (antigenic load) in the gastic mucosa.

The goal of our study was to evaluate the accuracy rate of the commercially available *Hp* serology test (Roche Biomedical Lab., Labcorp), for the diagnosis of Hp infection in 121 children who were seen at the Pediatric Gastroenterology Clinic at the Marshall University Joan C. Edwards School of Medicine in Huntington between April 1994 and December 1996.

## Materials and methods

We reviewed all upper endoscopies performed in symptomatic children who were seen at the Pediatric Gastroenterology Clinic at the Marshall University Joan C. Edwards School of Medicine from April 1994 and December 1996. *Hp* serology was routinely determined in every new patient with clinical symptoms suggestive of *Hp* infection. None of the children had antibiotic treatment for at least one month prior to endoscopy.

Charts were reviewed for age, gender, serum *Hp* anti-IgG antibody (*Hp*Ab) results, and histology. Hp serum antibody level was determined by an outside reference laboratory - Roche Biomedical Laboratory, Inc. (Labcorp) prior to the endoscopic procedure. This serological test measures IgG antibody, utilizing the Cobras-Core anti-Hp EIA method. In adults, the test showed an adequate sensivity and specificity rate (> 90%) compared to histology (11).

### Endoscopy procedure

Parental consent was obtained for each endoscopic procedure. Regardless of the mucosal appearance, in each procedure, at least two antral biopsies were obtained for routine pathological examination.

Inflammation (gastritis) was assessed by H & E staining and was graded according to Sydney criteria (12). *Hp* organism density was assessed by Giemsa staining in all antral biopsies and was graded on a 0-3 scale previously described by El-Zimaity et al (13) that rated colonization as either absent (0), scant (+1), moderate (+2) or heavy (+3). Positive *Hp* infection was defined as the presence of *Hp* bacteria in the tissue. Hp-associated gastritis disease was considered whenever *Hp* organisms and histological gastritis were found on the same biopsy.

The pathologist was blinded to the serology results at the time of biopsy evaluation.

### Statistics

Regression analysis was used to assess the correlation between positive serology and the histological factors of gastritis, *Hp* organisms and *Hp*-associated gastritis. ANOVA test was used to assess the correlation between positive serology and the degree of gastric inflammation and *Hp* density. StatWorks™ software was used for all analysis (Data Metrics, Inc. 1985, Philadelphia, Pa.)

## Results

A total of 121 patients were included in the study with a mean age of 11.8 ± 4 years (range - 2-18 yrs.) and male/female ratio of 0.98:1.0. The major presenting clinical symptoms of these children were abdominal pain (82.6%) and vomiting (37.2%).

Positive *Hp* serum antibody was found in 21/121 (17%) patients. Gatritis was found in 49 (40%) patients with the following histological grading: grade +1 in 34 patients, grade +2 in 14 patients, and grade +3 in one patient. *Hp* organisms were detected in 32 (26%) patients and with the following grading: grade +1 in 19 children, grade +2 in eight children and grade +3 in five children. In one patient, Hp organisms were found with normal histology. None of our patients had gastric ulcer and one patient had a duodenal ulcer.

*Hp* serology detected *Hp*-gastritis with a sensitivity, specificity, positive and negative predictive values of 51.6%, 94.4%, 76.2% and 85%, respectively. Since immune response is enhanced by the inflammatory process, we further evaluated the correlation between positive serology and several factors including age; the presence of *Hp* organisms on histology; gastritis; and *Hp*-associated gastritis. Multiple regression analysis showed a significant correlation with age ($p = 0.049$), but not with Hp organisms ($p = 0.731$), gastritis ($p = 0.972$), or Hp associated gastritis ($p = 0.672$).

Positive serology was significantly correlated with increased inflammatory index and increased *Hp* density in the gastric mucosa (ANOVA test, $p < 0.001$, coefficient of correlation 0.51-0.53 (Table 1.)

**Table 1. Hp Serology, Histological Grading and H. Pylori Density. of the 121 Children Evaluated with Hp infection.**

| Parameter | Hp-Serology+ | Hp-Serology- | p Value* |
|---|---|---|---|
| ***Gastritis:*** | | | |
| Normal (G-0) | 04 (6%) | 68 | |
| Mild (G-1) | 06 (18%) | 28 | |
| Moderate (G-2) | 10 (71%) | 04 | |
| Severe (G-3) | 01 (100%) | 00 | 0.000 |
| | | | r = 0.53** |
| ***Hp-density:*** | | | |
| +0 | 05(6%) | 84 | |
| +1 | 09(47%) | 10 | |
| +2 | 03(38%) | 05 | |
| +3 | 04(80%) | 01 | 0.000 |
| Total | 21 | 100 | r = 0.51** |

**ANOVA analysis*
***Coefficient of Correlation*

## Discussion

Histologic confirmation of *Hp* organisms in the gastric mucosa is considered the "gold standard" for the diagnosis of *Hp* infection in children (1). In the managed care environment, cost-containment and cost-effectiveness have become major players in the diagnostic process.

Since *Hp* infection has been determined to be the major etiological factor for peptic ulcer disease, prior serological screening for *Hp* infection has emerged as a possible method to reduce the cost of testing adults (6-10), and children (14). Concurring with a previous recommendation (15), we showed that the accuracy of the commercially available *Hp*-serology is inadequate for children and cannot be used as a screening tool for "test to treat" protocol.

In our study, positive serology detected *Hp*-associated gastritis with a sensitivity and positive predictive value of 51.6% and 76.2%, respectively. Utilizing the same serological test-kit in children, similar accuracy rate was reported by Rocha de Oliveira et al (16). In addition, concurring with our finding, direct correlation was found between test sensitivity and increasing age.

On the other hand, in comparing our study with other serological tests, we reported a lower accuracy rate (3,17-19). It is now accepted that a significant variability in accuracy rate among tests will be found once using different population (20). Thus, it is now recommended that *Hp* test-kit should be initially validated locally before utilizing it for clinical purposes.

Histological evidence of *Hp*-associated gastritis was reported in 31 patients, but positive serology was found in only 16 patients (52%). The development of serum antibody is closely related to the host's immune mechanism (21), and the gastric antigen load (*Hp* density) (22). We further examined the correlation between serology results and the degree of gastric inflammation and/or density of *Hp* organisms colonizing the gastric mucosa. Data showed that positive serology was directly related to the grading of antral inflammation and/or *Hp* density in the gastric mucosa (ANOVA $p < 0.000$; coefficient of correlation: 0.51-0.53) (Table 1).

This data supports the correlation between antibody development and the host immune response.

## Conclusion

In summary, the low sensitivity and low positive predictive value of the *Hp* serology test (Labcorp) to detect *Hp*-associated gastritis in children is unacceptably low. We postulate that

the mild gastric inflammation and the lower bacterial inoculation, commonly seen in children, are crucial factors in this finding.

Our results lead us to conclude that serology should not be used to diagnose *Hp* infection in children, and that endoscopy remains the "gold standard" for diagnosing this disease in children.

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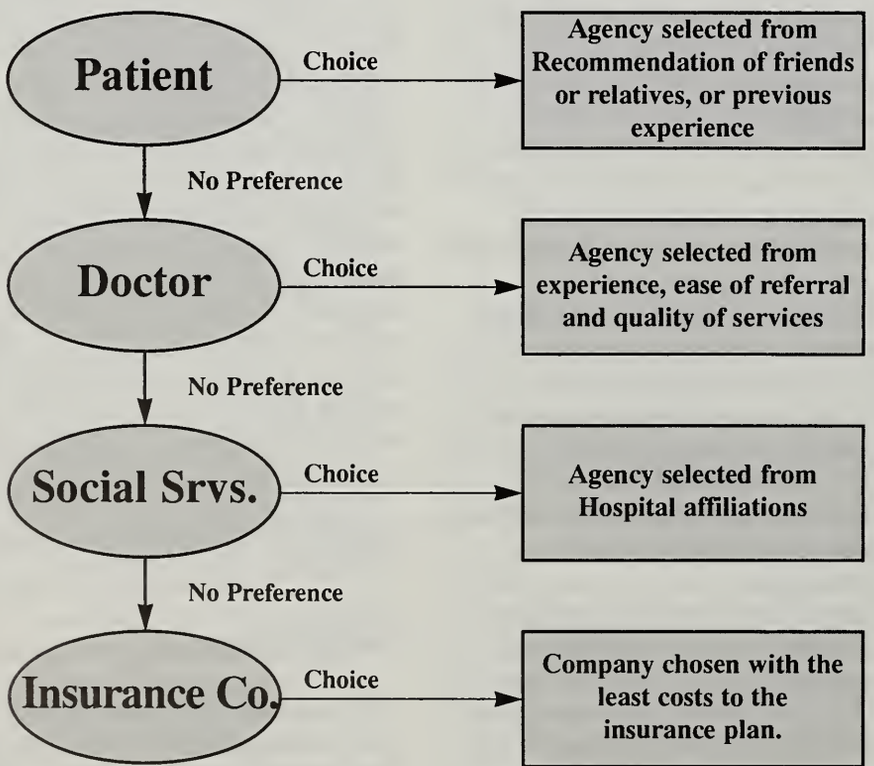
*(Please contact the first author for the other references in this article.)*


# Healthcare — Who's Choice is it?

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# Syndrome myxoma presenting as a pulmonary embolism: A case report

***STEPHANY K. MOORE, M.D.***

***KEVIN J. MOORE, M.D.***

***PAULETTE WEHNER, M.D.***

***MOLLY JOHN, M.D.***

***K.C. LEE, M.D.***

*Department of Cardiovascular Services, Marshall University Joan C. Edwards School of Medicine, Huntington*

***ABSTRACT***

***Although the incidence of primary cardiac tumors is approximately 0.28%, they are encountered in every age group and their clinical presentation usually resembles that of other cardiac or systemic diseases. The clinical symptoms of primary cardiac tumors are usually few until they are at an advanced critical stage making early diagnosis and treatment problematic. However, there is a subgroup of patients who may present with extracardiac systemic, endocrinologic or cutaneous manifestations and familiar inheritance allowing for early detecton. This article desribes the diagnosis and treatment of a young female who presented with an acute thromboembolic complication of an intracardiac myxoma.***

## Introduction

Even though the incidence of primary cardiac tumors is approximately 0.28%, they are encountered in every age group and their clinical presentation usually resembles that of other cardiac or systemic diseases. Due to the potential life-threatening complications of cardiac tumors, their early diagnosis and surgical treatment is essential.

However, the clinical symptoms of primary cardiac tumors are usually few until they are at an advanced stage making early diagnosis and treatment problematic. There is a subgroup of patients who may present with extracardiac systemic, endocrinologic or cutaneous manifestations and familial inheritance allowing for early detection. In 1997, Vidaillet et al described a series of 114 patients diagnosed with primary cardiac myxomas. Forty-four of these patients presented with distinctive clinicopatholic features and multisystem involvement, which they regarded as a distinctive subgroup and referred to these patients as representative of "syndrome myxoma."

Conversely, patients with "syndrome myxoma" are usually younger have characteristics that include unusual skin freckling; benign non-cardiac myxomatous tumors; endocrine neoplasms; and a high frequency of familial myxomas. The myxomas in this subset of patients tends to be multiple, may have ventricular locations, and may be recurrent. Therefore, patients with syndrome myxoma may be diagnosed at an early stage secondary to the cutaneous and multisystem involvement.

In this article, we report the case of a young female who presented with an acute thromboembolic complication of an intracardiac myxoma. This case is especially interesting because the patient had a long history of iron deficiency anemia of undetermined etiology, a history of prior surgical excision of a benign mammary fibroadenoma, and a history of surgical excision of multiple facial skin lesions (freckles) 13 years prior to presentation.

## Case report

A 30-year-old female presented to the ED at the Charleston Area Medical Center in Charleston complaining of sudden onset of sharp chest pain, which radiated to her back and left neck. This pain was exacerbated by deep inspiration and coughing. She had been experiencing shortness of breath, orthopnea for a month, and for three days had paroxysmal nocturnal dyspnea.

Her vital signs revealed a respiratory rate of 20, pulse of 102, temperature of 37.6°, and systemic blood pressure was 113/47. On physical examination, multiple mid systolic knocks and a diastolic rumble were auscultated. Her lungs were clear. She was found to have multiple darkly pigmented facial lesions with irregular borders. Electrocardiogram revealed normal sinus rhythm with right axis deviation, right atrial enlargement, and probable right ventricular hypertrophy. An arterial blood gas was performed and demonstrated a $PaO_2$ of 92% on room air. Chest radiograph was unremarkable. Erythocyte sedimentation rate was elevated at 77. Hemoglobin was 9.2.

Due to the patient's complaints of acute dyspnea, a ventilation perfusion scan was obtained. It showed a high probability for pulmonary embolus. A CT scan was performed which revealed a large filling defect in the right atrium and right ventricle along the septum extending into the left atrium. A transthoracic echocardiogram demonstrated three distinct intracardiac masses in her left

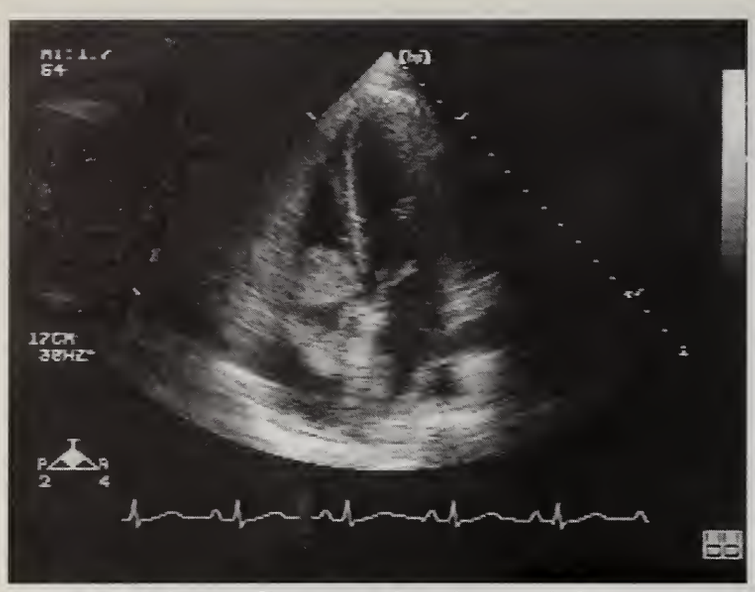

***Figure 1.*** **Echocardiogram showing atrial myxomas in the right ventricle, right atrium and left atrium.**

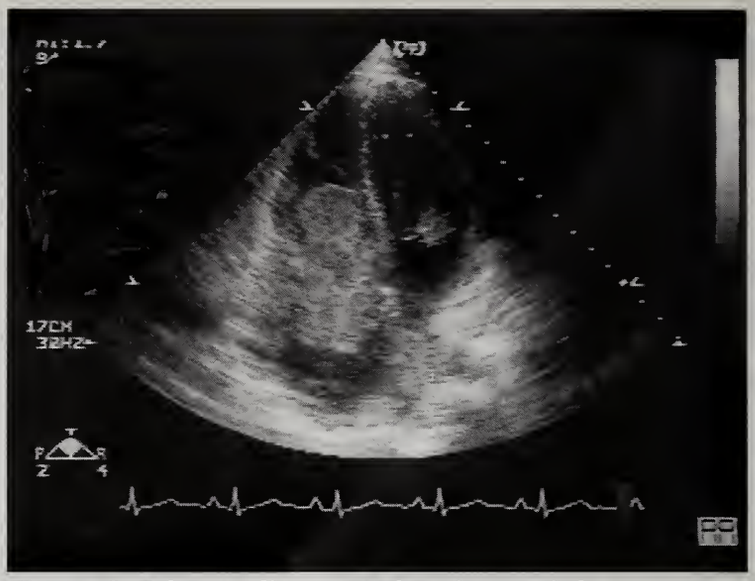

***Figure 2.*** **Echocardiogram showing atrial mxyoma prolapsing through the tricuspid valve.**

ventricle, right atrium and right ventricle (Figures 1,2,3). The mass within the right atrium was very large measuring approximately 8 x 3 cms. and it prolapsed into the right ventricle during diastole.

She underwent surgical excision of her cardiac tumors without complication. Surgical pathology revealed cardiac myxomas. She was discharged after an uneventful postoperative course.

The most common presentation of cardiac tumors is primary cardiac dysfunction such as coronary artery disease, congestive heart failure, valvular disease and tamponade. The next most common presentation is of embolization. Only 5%-10% of cases are diagnosed clinically. The findings may be indistinguishable from pulmonary emboli secondary to venous thromboembolism. Multiple systemic emboli may mimic systemic vasculitis of infective endocarditis, especially when associated with other manifestations of systemic illness such as fever, weight loss, art hralgias, elevated erythrocyte sedimentation rate.

The diagnosis is also complicated by the fact that most myxomas cause a variety of non-specific clinical signs and symptoms that often masquerade as many other more common cardiovascular and systemic diseases. These diseases include pulmonary hypertension, rheumatic fever, myocarditis, mural thrombus and lupus erythematosus.

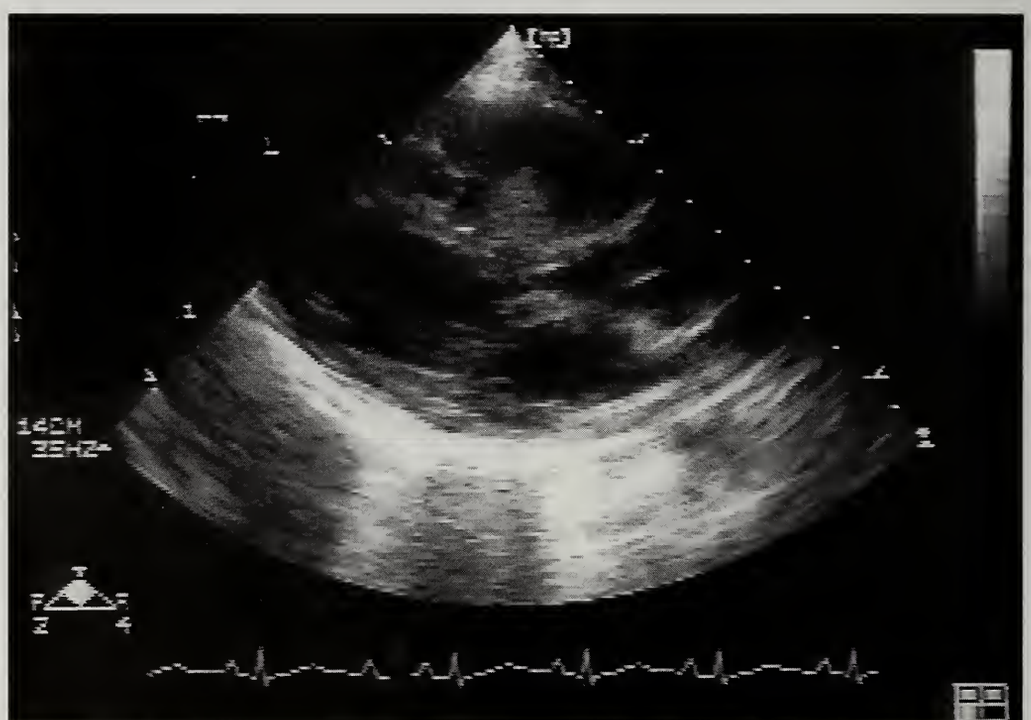

***Figure 3.*** **Echocardiogram showing parasternal long axis. Note the myxoma in the right ventricle.**

## Conclusion

Patients with syndrome myxoma usually present at a younger age, and have unusual facial freckling, associated benign non-cardiac myxmatous tumors, endocrine tumors, and high frequency of familial myxomas. It is a multisystem disease with important clinical, surgical and genetic implications.

The pattern of heredity transmission in familiar cardiac myxoma appears to be that of autosomal dominance. It has a 25% rate of recurrence at the same or different intracardiac sites. All first-degree relatives should be examined regularly for evidence of cardiac myxoma or other clinical entities. Emboli in a young patient who has a sinus rhythm should raise the possibility of a cardiac tumor.

Preventing possibly life-threatening complications by curative surgical intervention highlights the urgency of early detection of myxomas.

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# Mid-Winter Clinical Conference & Business Meeting set for March 1-4 at The Homestead

The WVSMA's Mid-Winter Clinical Conference will be combined with the WVSMA's Business Meeting next year and this event is planned for March 1-4 at The Homestead in Hot Springs, Va.

This combined meeting will feature an Executive Committee Business Meeting on Thursday, March 1 at 4 p.m., with a Council Meeting scheduled for 5 p.m. The meeting will then officially begin at 8 a.m. the next day, with registration and the First Session of the House of Delegates at 9 a.m.

Immediately following the House of Delegates Session, a meeting of the Resolutions Committee will take place at 11:30 a.m., and then at 1 p.m. the First Scientific Session will be presented. A WESPAC Board Meeting is scheduled for 5 p.m. and then a reception will take place at 5:30 p.m.

Saturday's agenda will begin with a WVSMA Surgery Section Breakfast Meeting at 7:30 a.m. and a Medical Education Committee Meeting at 8 a.m. Registration will start at 8:30 a.m. and the Second Scientific Session will convene at 9 a.m. At noon, a Lunch & Learn is planned and a variety of specialty society luncheon meetings wiil be conducted. The other events that day will include the Third Scientific Session and a reception.

The conference will conclude on Sunday after all of the business for the Second Session of the WVSMA House of Delegates is completed. This session will include the election of new officers, a CME lecture and reports from the Constitution and Bylaws and the Resolutions Committees.

The Homestead is situated on 15,000 acres and was built in 1766. It features three golf courses, a European-style spa, horseback and carriage rides, shooting sports, hiking, mountain biking, falconry, fly fishing, bowling, skiing, snowboarding, snow tubing and ice skating.

For more information about the meeting, contact the WVSMA at (304) 925-0342. For reservations at The Homestead, phone (800) 838-1766 and state that you will be attending the WVSMA's Mid-Winter Clinical Conference & Business Meeting.

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# Plan now to attend Legislative Reception, White Coat Day!!

**The WVSMA has scheduled its annual Legislative Reception for Feb. 19 and White Coat Day at the Legislature for Feb. 20. The Legislature will be dealing with several critical health care issues this session so it is imperative that physicians attend in large numbers.**

These very important events will begin with a presentation entitled *"Lobbying the Legislature"* on Monday afternoon, Feb. 19 at the Embassy Suites in Charleston. After this briefing, the Legislative Reception will take place.

The next morning, participants will be updated on policy issues and then will head over to the State Capitol to lobby their legislators and watch the sessions of the Senate and the House of Delegates in action. *Physicians are encouraged to wear their white coats and bring their spouse, office manager or anyone who is concerned about medical issues.*

More information will be mailed to members in the next few weeks or you may phone the WVSMA at (304) 925-0342.

# BC/BS liquidation payments almost ready for mailing

Physicians and other health care providers who filed claims in the final liquidation of Blue Cross Blue Shield of West Virginia, Inc. should be receiving their checks within the next few weeks. A court order signed in mid September paved the way for nearly $10.7 million to be put towards more than 21,300 claims.

As reported in the last issue of the *Journal*, physicians should receive about 50¢ on the dollar for their claims, with total payments exceeding $3 million. The WVSMA actively defended throughout the decade of the 90s the priority interest of physicians.

# FP/Sports Medicine Weekend set for Nov. 17-19

Huntington will host over 1,300 health care professionals, exhibitors and family members during the 14th Annual Family Practice Weekend & Sports Medicine Conference which will take place Nov. 17-19 at the Radisson Hotel.

Family physicians and other health care professionals attending this conference will review current clinical concepts in family medicine and sports medicine. During the conference, a total of 22 hours of CME credit, acceptable for re-licensure in West Virginia, will be offered.

Topics to be addressed include sports medicine; Hepatitis C; new influenza treatments; osteoporosis; asthma; diabetes; cardiovascular risk factors; rheumatoid arthritis; voice disorders; endoscopic sinus surgery; Alzheimer's disease; vertigo; depression; eye injuries; performance enhancement; ankle sprains; facial trauma; and hypertension.

Some of the nationally-known speakers who will be lecturing this year include Michael Ganz, M.D., from Case Western Reserve University; Gary Ledley, M.D., from Albert Einstein Medical Center; Michelle Petri, M.D., from John Hopkins University; Douglas McKeag, M.D., from the Indiana University School of Medicine; and James Lewis, M.D., from Georgetown University School of Medicine.

Petri

McKeag

Lewis

Gaines

Rowdy Gaines, who won three gold medals in swimming at the 1984 Summer Olympics, will be the celebrity speaker at the sports medicine program on Sunday, Nov. 19. A reception for the Family Medicine Foundation will take place on Friday evening, Nov. 17 in the Patio Room at the Radisson Hotel. All proceeds from the conference go to the Family Medicine Foundation for its charitable projects and ESP Scholarship program for medical students in need who will stay in WV and practice family medicine.

For more information, call Chris Ferrell at the Foundation office at (304) 765-7839.

## Dr. Datta named clinical professor at WVSOM

Datta

Dr. Chinmay K. Datta, a staff pathologist at United Hospital Center in Clarksburg, has been promoted to clinical professor of pathology at West Virginia School of Osteopathic Medicine in Lewisburg. He is also a clinical professor of pathology at the WVU School of Medicine in Morgantown.

Dr. Datta is a past president of the United Hospital medical staff and the Harrison County Medical Society. He obtained his M.D. and Ph.D. degrees from the University of Calcutta, India.

## Palm Springs site for Psychosomatic Medicine Meeting

The theme of the 47th Annual Meeting of the Academy of Psychomatic Medicine will be *"Consultation-Liaison Psychiatry at the Interface"* and this conference will take place Nov. 16-19 in Palm Springs, Calif.

For more information, phone (773) 784-2025.

## *Newborn medicine fellowship grants program created*

Forest Pharmaceuticals, Inc. has established an Advancing Newborn Medicine Fellowship Grant Program.

For details about the grants, contact Phase Five Communications at 1-888-706-3899.

## Brashear anatomy course scheduled for March 12-16

The Alton D. Brashear Postgraduate Course in Head & Neck Anatomy at Virginia Commonwealth University School of Medicine in Richmond will take place this year from March 12-16.

The primary teaching method is the dissection of the head and neck. Lectures, demonstrations and audiovisuals demonstrating specific anatomical relationships of organs and organ systems, will augment the laboratory dissections. This course is for individuals who hold an M.D., D.D.S., or Ph.D. degree or equivalent.

The class size will be limited to 36. It is approved for 43 credit hours by the Academy of General Dentistry. The tuition is $450 for practitioners and is $300 for residency students.

For more details, contact Dr. Hugo R. Seibel at (804) 828-9791.

# CME & Special Events

## Camcare Health Educ. & Research Institute

***"Medical Compliance Issues: Hot Topics"***
Nov. 1, 12:15 p.m., M. Jill Griffith, CAMC Compliance Officer, Montgomery General Hospital, Montgomery

***"Issues in Medical Ethics Basic Certification Program***
Nov. 3, C. Sue Warren, M.D., Harry L. Reahl, M.D., Robert Hall, Ph.D., program chairmen, Camcare Health Education and Research Institute, Charleston

***"Diabetes: Update 2000"***
Nov. 16, 6 p.m., Peggy Adams, M.S.N., R.N.,C., C.D.E., Comfort Inn, Summersville

***"Advanced Cardiac Life Support Renewal Course"***
Nov. 16 & Dec. 8, 8 a.m. - 4:30 p.m., Robert C. Byrd HSC of WVU, Charleston Division, Charleston

***"Pediatric Advanced Life Support Provider Course"***
Nov. 16-17 & Dec. 8-9, 8 a.m. - 4:30 p.m., Camcare Institute Education and Training Center, Charleston

***"Advanced Cardiac Life Support Provider Course"***
Nov. 17 & Dec. 9-10, 8 a.m. - 4:30 p.m., Camcare Institute Education and Training Center, Charleston

***"Pediatric Advanced Life Support Renewal Course"***
Nov. 17 & Dec. 10, 8 a.m. - 4:30 p.m., Camcare Institute Education and Training Center, Charleston

***"Non-Small Cell Lung Cancer"***
Nov. 20, noon, Joseph Treat, M.D., CAMC Memorial Div./ WVU Building, Charleston

***"West Virginia Trauma Symposium"***
Jan. 18-19, James Kessel, M.D., David Denning, M.D., Peter Mucha, M.D., and David Kappel, M.D., program chairmen, Snowshoe

## Huntington Medical Education Foundation

***"Huntington Radiological Services"***
Nov. 8, 6 p.m. dinner & 6:30 p.m. lecture, Rodger Blake, M.D., Tug Valley Medical Society, The Brass Tree R Restaurant, Williamson

***"New Guidelines for TB"***
Nov. 15, 6 p.m., dinner & lecture, Harry Tweel, M.D., Williamson Memorial Hospital Medical Staff Meeting, Williamson Memorial Hospital, Williamson

***"AIDS: Care, Concerns and Controversies"***
Nov. 16, 6 p.m., Thomas Rushton, M.D., F.A.C.P., Highlands Regional Medical Center Medical Staff, Jenny Wiley State Park, Prestonsburg, Ky.

## The Joan C. Edwards School of Medicine at Marshall University

***"Polypharmacy in the Elderly: Defining the Problems and Solutions"***
Nov. 2 & 3, 8 a.m., MU Medical Center, Huntington

***"WVAAFP Sports Medicine Conference"***
Nov. 17-19, Radisson Hotel

***"Management of Advanced Stage Non-Small Cell Lung Cancer"***
Nov. 20, 6 p.m., Joseph Treat, M.D., HBC, Erickson Alumni Ctr.

***"Overview of Non-Small Cell Lung Cancer - New Treatment Strategies"***
Nov. 21, 6 p.m., Joseph Treat, M.D., St. Mary's Hospital

***"The Role of Vascular Growth and Other Factors Sustaining Transplanted Islet Growth"***
Nov. 27, 6:30 p.m., S. L. Mokshagundam, M.D., MU Student Center

***"New Approaches to Insulin Delivery & Islet Transplantation"***
Nov. 28, 8 a.m., S. L. Mokshagundam, M.D., St. Mary's Hospital

## Robert C. Byrd HSC - Morgantown

***"6th Annual Low Back Pain Conference"***
Nov. 3, Robert C. Byrd HSC, Morgantown

***"Newer Antibiotics in Respiratory Tract Infections"***
Nov. 4, Robert C. Byrd HSC, Morgantown

***"17th Annual Hypnosis Training Workshop"***
Nov. 10-11 *(sponsored by the Carruth Center for Counseling and Psychological Services, WVU Hypnosis Study Group, and WV Psychological Association)*, Robert C. Byrd HSC

**"Orthopedic Reunion Day: General Orthopedics with Emphasis on Hand and Upper Body Extremity"**
Nov. 17-18, Location TBA, Morgantown

***"Urology Mock Boards"***
Jan. 11-13, Embassy Suites, Pittsburgh

## West Virginia State Medical Association

***"WVSMA's Mid-Winter Clinical Conference & Business Meeting"***
March 1-4, The Homestead, Hot Springs, Va.

# Poetry Corner

## Winter's Ill Wind

I set here
in my chair
rocking, watching the autumn leaves fall.
I recall the spring
and early summer
with fondness, relishing
memories of warm sunlit days
little victories and major triumphs,
smiling
about time well spent,
turning away
tears over a fall
early and unexpected
and winter soon to follow.

*Steven Pflanz, M.D.*

## Creeks Again

Again a trickle
then there they came —
patterns of rivulettes
etched in shade.

They shiver soot,
almost . . . back —
unblackened through.
We've creeks again!

*John Henry McWhorter, M.D.*

*This page paid for by the West Virginia Bureau for Public Health.*

# Norwalk virus strikes in Pocahontas County

Having worked as a sanitarian for 22 years, I have investigated many outbreaks of infectious diseases, even a couple which were waterborne. Who would have thought that the tables would be turned and I would be investigating an outbreak that recently affected me.

The Boy Scouts in our area have a week-long program named Wilderness Rangers where Scouts and Scouters visit the wildlife areas in the eastern part of West Virginia. We left Huntington on a Monday and camped at Dilley's Mill in Pocahontas County. On Tuesday night about midnight, the two scouts began vomiting and having diarrhea. Over the next several days, 23 out of 24 Scouts, 13 out of 14 Scouters, and five out of nine visitors became ill with gastroenteritis.

Prior to the beginning of our trip, I had heard some rumors that maybe the camp had been having problems for several years. The Buckskin Scout Council denied any problems. The Pocahontas County Sanitarian thought that maybe there had been some problems with the food served during the regular camp, but the water had tested safe *(no bacterial contamination.)* Since we had our own cooks and a different menu, I thought maybe that something was wrong with the water supply and since the water had tested safe bacteriologically, the culprit must be virus.

Dr. Danae Bixler, epidemiologist, Mike Hawranick, P.E., and Ed Riley, R.S., joined me for a thorough investigation of the camp's water system. We found several situations that indicated problems with the drinking water. The well water was not being chlorinated as required by legislative rule; one well was full of blackish gray particles and smelled like sewage; and the water storage tank had several inches of sludge in the bottom.

The commodes were treated with dyes and the dye surfaced around the well casing on a second well. So, it appeared that there was a broken sewer line which was leaking into the well. Samples of the water taken from these two wells showed the presence of *E. coli* which indicated sewage contamination. The sewage lagoon was located about 100 yards away from the wells. Due to the high rates of incidence, the epidemiological study was inconclusive since there was no control group to compare. The stool samples and vomit samples indicated that Norwalk virus was present.

The Norwalk virus was first recognized as the agent of an epidemic in Norwalk, Ohio, in 1968. At the time, the laboratories did not have the necessary means for detecting viruses, so the researchers could only speculate the outbreak was viral in origin because bacteriological ad protozoal stool sample tests were negative. When volunteers were tested with a sample they also became ill, so there was indirect evidence of a viral epidemic source.

Norwalk virus was later observed under a electron microscope in the early 1970s to the 1990s, molecular cloning techniques allowed for easier virus identification. Sewage-contaminated ice and contaminated water wells results in numerous outbreaks.

Viruses are obligate parasites. They require a viable host cell for growth and do not replicate in water, so viruses do not technically "live." By contrast, bacteria generally require some time, a favorable temperature climate, and an appropriate growth medium before amplication adequate for infection can occur. Unlike bacteria, viruses can remain viable for long periods of time on food. The lowness of the doses required for infectivity contributes to the high frequency of the disease. The mode of disease transmission is primarily fecal - and - vomit - oral.

Viral outbreaks present interesting and challenging dilemmas for public health officials. The combination of low infective dose and the microscopic size of the virus particulate constitutes an unforgiving context for epidemic prevention.

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# Robert C. Byrd Health Sciences Center of West Virginia University News

## Director named for Mary Babb Randolph Cancer Center

Reed

Eddie Reed, M.D., chief of the ovarian cancer research and treatment program of the National Cancer Institute, has been named director of Mary Babb Randolph Cancer Center at WVU's Robert C. Byrd Health Sciences Center.

Dr. Reed - who was awarded the U.S. Public Health Service Commendation Medal in 1993 for his pioneering work in the use of Taxol in ovarian cancer - is the holder of four patents for his work in developing cancer treatments and tests.

"Dr. Reed is known throughout the world for his innovative scientific work, and for the care he has given to patients at the NCI," said Dr. Robert M. D'Alessandri, dean of medicine and vice president for health sciences at WVU. "Our faculty are eager to begin working with him, and we expect that he will attract the very best physicians and researchers to the Mary Babb Randolph Cancer Center over the next decade."

Dr. Reed joined the NCI in 1981, and since 1991 has been chief of the Medical Ovarian Cancer Section, Medicine Branch, of the Division of Clinical Sciences at NCI's Bethesda, Maryland, campus. He is clinic leader for both ovarian cancer and metastatic prostate cancer at the NCI.

He is a graduate of Philander Smith College and the Yale University School of Medicine, with advanced training at Stanford University and the NCI.

## West Virginia's first Stroke Center opens

"Time is brain cells," says WVU neurologist Dr. David Libell.

That's why WVU opened the state's first stroke center Aug. 1. Every hour that passes between the onset of stroke symptoms and the beginning of medical treatment increases the chance of permanent damage to the brain.

WVU's Stroke Center offers emergency treatments that may stop a stroke while it is happening. "We now have the ability in some cases to fix strokes, or prevent brain damage before it occurs — if we see a patient soon enough," said Dr. Libell, who specializes in stroke and neuromuscular diseases.

Other members of the multi-disciplinary stroke team are Dr. Julian Bailes, chair of neurosurgery, Dr. Ann Chinnis, interim chair of emergency medicine, and Dr. Abdulkader Al-Azzaz, a neuroradiologist who specializes in neurointerventional and diagnostic radiology. The newest drug therapies and state-of-the-art technologies will be offered to provide timely treatment of stroke, in order to minimize permanent damage. Prevention and rehabilitation services are also offered.

## Children's Hospital opens new birth area

West Virginia's most advanced facility for childbirth is now more comfortable for mothers and families.

The new Maternal and Infant Care Center at Children's Hospital opened recently, providing care for mothers and babies in large, comfortably equipped rooms that have plenty of space for fathers, siblings and others who want to visit before, during and after a baby's birth.

The same rooms that healthy mothers and babies use for uncomplicated births can be instantly converted to fully-equipped hospital birth rooms. Behind the art and furnishings are fetal monitors, oxygen, exam lights and other diagnostic and treatment equipment.

## Cystic Fibrosis Center regains accreditation

WVU's Mountain State Cystic Fibrosis Center has regained its status as the only center in the state accredited by the Cystic Fibrosis Foundation. The Center, which serves nearly 100 patients, lost its accreditation in 1998, but reacquired accreditation after a CFF visit in April.

"Even when we were not accredited, we still maintained a high level of patient care," said Dr. Kathy Moffett, director of the center. "We're listed on the Foundation's web site so patients new to the area can find about us easily and won't have to go to Pittsburgh."

Dr. Moffett said accreditation also allows WVU to participate in drug studies, which gives patients the chance to try the latest medications.

## Blood and marrow transplantation program recognized

The Cancer Center's Blood and Marrow Transplantation Program recently received a Certificate of Excellence from the National Marrow Donor Program.

The certificate was earned because of WVU's quality and effectiveness in submitting follow-up forms that help investigators at the National Marrow Donor Registry evaluate the effectiveness of bone marrow transplants and improve options available to patients.

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# Marshall University Joan C. Edwards School of Medicine

## Marshall dedicates Joan C. Edwards School of Medicine

**At the dedication of the Joan C. Edwards School of Medicine during Alumni Homecoming Weekend, Joan C. Edwards unveils her portrait with Senator Jay Rockefeller and Marshall University President Dan Angel.**

In what U.S. Sen. John D. Rockefeller IV called "one of the most important events in the history of Marshall University," the university dedicated the Joan C. Edwards School of Medicine Sept. 29.

The dedication brings closure to Angel's May 6 announcement that the school was being renamed in honor of Edwards, making it the first medical school in the United States to be named for a woman.

"She's one of a kind, and she's making things happen here, for West Virginia and for America, that will allow people who could never touch health care before to have it," said Rockefeller.

Marshall University President Dan Angel said Mrs. Edwards' contributions to Marshall have been marked by her generosity, her enthusiasm and her personal involvement. Her most recent commitment is $2 million to the School of Medicine to begin the planning, design and development of a children's cancer pavilion. She has provided in her will for an additional $16 million to come to Marshall to construct and operate the center, which is to be built on the Cabell Huntington Hospital campus.

"The impact of Mrs. Edwards' vision and generosity with this pavilion will start being felt when the first patient walks through the door, but the ripple effects will continue to grow for years and even generations to come," Angel said.

## Marshall, VA open Logan clinic

The Huntington VA Medical Center has announced a joint effort with Marshall University that will improve access to primary health care services for veterans in the Logan County area.

Partnering with the Dept. of Family and Community Health at Marshall's Joan C. Edwards School of Medicine, the VA this year will enroll up to 200 veterans for health care at the family practice office of Logan physician Harry Fortner, M.D. The VA Medical Center plans to expand enrollment to 200 more patients later in 2001 and another 200 patients in 2002, bringing the total enrollment to 600 veterans. Veterans currently enrolled with the Huntington VA Medical Center will be given priority to relocate their care to the new clinic.

MU and the Huntington VA Medical Center have a long history of working together and sharing resources to improve the health care of veterans. Expanding primary care services into Logan County has been a long-term objective of both organizations.

"We and our colleagues at the VA share a vital interest in the critical issue of providing health care services to veterans in the rural parts of our state," said Dr. Robert B. Walker, chairman of MU's Dept. of Family and Community Health. "This project gives us a way to cooperatively meet the health care needs of veterans in Logan County."

## MU testing picornavirus drug

Marshall is participating in a nationwide study to determine whether a new antiviral drug now in the testing stage is effective for treating viral respiratory infection.

"Colds account for 26 million lost school days and 23 million lost work days a year, with literally billions of dollars being spent each year on doctor visits and medications," said Dr. Chitra Mani, a specialist in pediatric infectious diseases at MU. "If it is approved, this new medication, pleconaril, could become the first antiviral treatment not just for colds, but also for other diseases such as viral meningitis and sepsis, which are caused by the same type of virus."

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# West Virginia School of Osteopathic Medicine News

## WVSOM hosts "White Coat" Ceremony

**The WVSOM Class of 2004 began first-year studies on August 14.**

"Be proud of your individual accomplishments, proud of your choice of medical schools, and proud of your chosen profession," advised Olen Jones Jr., Ph.D., at WVSOM's second annual Convocation and White Coat Ceremony.

Dr. Jones, president of WVSOM, addressed the class of 2004, which consists of 77 students, at the Aug. 25 ceremony which celebrates the official start of a student's osteopathic education and progress toward a career as a physician.

During the proceedings, students pledge their commitment to the osteopathic profession and to the health of the communities they will serve, and are also presented with white lab coats, which symbolically mark their entry into the osteopathic medical community.

'WVSOM has become a nationally recognized program. This is evidenced by the accolades heaped upon the school and its faculty over the last several months," Dr. Jones said, mentioning the school's inclusion in the *U.S. News & World Report's* primary care medical school rankings and several other awards.

Also addressing the crowd at the event were keynote speaker Greg Wallace, D.O., associate professor of pediatrics at WVSOM; Dave Nicholas, D.O., president of the WVSOM Alumni Association; and Andy Gamill, president of the WVSOM Student Government Association.

## Study shows WVSOM impact on local economy

WVSOM generates more than $24 million for the Greenbrier Valley economy according to a new study just released by WVSOM.

The study, *"Economic Impact of the West Virginia School of Osteopathic Medicine on the Local Economy,"* reveals that WVSOM has a $24.3 million impact, directly and indirectly, on Lewisburg and other surrounding Greenbrier Valley communities — a 119% increase since 1990. In addition, over 900 jobs are created by the school — up 66% over the last 10 years.

In determining the figures, the report considered not only those directly employed by the school, but also students, visitors and jobs and incomes created by school spending.

## Three new faculty members hired

**Fairley**

**Fisher**

Three new faculty members have recently been hired at WVSOM.

Dawn Fairley, D.O., is an associate professor of family medicine. She comes to WVSOM from the Western University of Health Sciences/College of Osteopathic Medicine of the Pacific in Pomona, Calif., where she was an asst. professor of family medicine. Before that, Dr. Fairley operated private practices in Carlilse, Ind., and South Bend, Ore. She has a B.S. degree from Northeast Missouri State University in Kirksville, Mo., and earned her D.O. degree from Kirksville College of Osteopathic Medicine.

Rodney Fisher, D.O., is an asst. professor of family medicine and pediatrics. He comes to WVSOM from Hurley Medical Center in Flint, Mich. Dr. Fisher has a B.S. degree in biology from Liberty University in Lynchburg, Va., and later earned his osteopathy degree from Ohio University-College of Osteopathic Medicine in Athens, Ohio.

Mary Walsh, D.O., is an asst. professor of pediatrics. She previously worked as medical director of all juvenile detention centers and prisons in the state of Maine. Prior to that, Dr. Walsh worked in a large pediatric practice in Gorham, Maine. She has a B.S. degree in human biology from the University of New England in Biddeford, Maine, and her D.O. degree from the New England College of Osteopathic Medicine.

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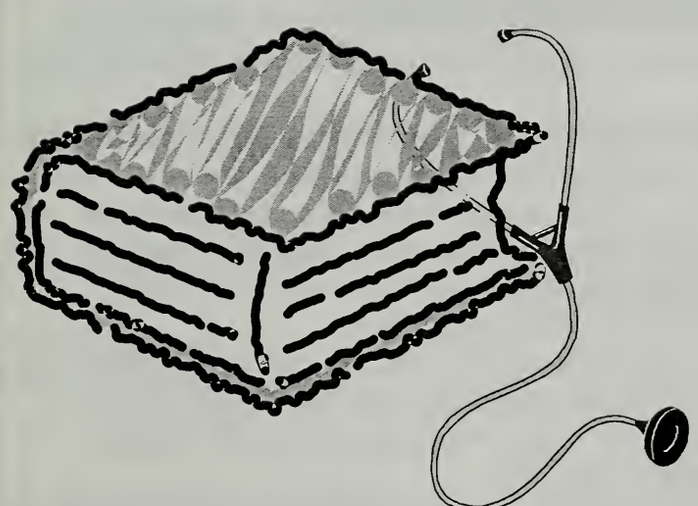

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# Members can increase our team efforts

I sit at my computer watching a house being built across the road. I see how the team works together to accomplish their task. Each has a specific talent or specialty to add to the team. There are several teams that accomplish a part of the whole house.

I thought of the AMA Alliance with each state being a team and each county alliance being a member of that specific team. We can accomplish so much more if we increase our members in the team and if we can increase the number of teams.

The Alliance has members on several teams in West Virginia. We are passing out materials to students to assist school principals and teachers in their efforts to decrease and prevent school violence. We also increase awareness of the problem of school violence by placing advertisements on billboards. In addition, 20,000 bookmarks are or have been distributed to the 9th grade students in WV to bring awareness to the problem of bullies and victims.

We work as a team promoting the SAVE program (Stop America's Violence Everywhere). A proclamation declaring October 11 as SAVE Today was officially signed by Governor Underwood on Sept. 26. We also support local abuse shelters.

We have members working with the WV Tobacco Coalition to help stop youth from smoking and using smokeless tobacco products. When the average age for a child to start smoking is 9-10, we must take notice and work even harder to protect our youth.

We have members on the team for breast cancer awareness working for research and education for the WV women. We have a team of speakers to provide education for organ donation and materials to become an organ donor. We have members on the team to educate our physicians and keep them up to date on the legislative activities so they can make informed judgments when choosing their candidates. We provide education to our own alliance members in our counties about financial activities and being able to make informed decisions about estate management.

With all these teams, the Alliance is already a strong viable organization, but just stop and think about what the Alliance could accomplish if **all** the spouses of WVSMA members were members of the Alliance. We could build a whole city instead of one house. We could reach all the county schools instead of 10 counties. We could . . .We could . . .We could. . .

YES, we could . . . If all spouses were to become Alliance members. I ask you to please encourage your spouse to join. With many more members on the team, we can really build a powerhouse.

Betty Kuppusami
President, WVSMA Alliance

# New Members

It is a pleasure to welcome these physicians who have recently joined the WVSMA:

Joan A. Lynch, MD
Huntington, WV

Shamoon A. Doctor, MD
Huntington, WV

Alfret Shakespere, MD
Ranson, WV

Frederic H. Pollock, MD
Charleston, WV

Michael T. Wayt, MD
Glen Dale, WV

Hong Zhang, MD
Parkersburg, WV

Kelly Fluharty, MD
Parkersburg, WV

Ernest Miller, DO
Parkersburg, WV

Kim Stooke, MD
Parkersburg, WV

Sharileda Vance, MD
Parkersburg, WV

Jeffrey Braham, MD
Parkersburg, WV

John K. Koch, MD
Parkersburg, WV

Marc L. Costa, MD
Parkersburg, WV

Sean DiCristofaro, MD
Hurricane

# WESPAC Members

We would like to thank these physicians for their recent contributions to WESPAC:

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Joseph B. Touma, MD
Omayma T. Touma, MD

## Dollar-A-Day ($365)

Rogelio A. Averion, MD
Catalino B. Mendoza Jr., MD
Joseph B. Selby, MD
John A. Wade Jr., MD
David L. Waxman, MD

## Campaigner Plus ($101-$200)

Luis A. Loimil, MD

## Campaigner ($100)

Roger A. Abrahams, MD
Anil B. Agarwal, MD
Stephen J. Wetmore, MD

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# Obituaries

## Carl Bemis Hall, M.D.

Hall

Dr. Carl Bemis Hall, 86, a family practice specialist in Charleston since 1946 and former chairman and president of the American Academy of Family Physicians, died at his Kanawha City home on Aug. 28 after a long illness.

Well known for his skill at singing "County Roads" and entertaining children as Santa Claus at St. Francis Hospital, Dr. Hall delivered thousands of babies as part of his family practice on Stockton Street.

A native of Williamson, Dr. Hall was a graduate of Williamson High School, who attended the University of Alabama and lettered in football in 1934 and 1935 at West Virginia University. He began practicing in Charleston in 1946 after graduating from West Virginia University and the Medical College of Virginia, completing an internship at Charity Hospital of Louisana and serving as a Major in the Medical Corps of the U.S. Army during World War II.

Before being named to the top national post of the 35,000-member American Academy of Family Physicians in 1975, Dr. Hall was president of the Kanawha Medical Society and a founding member and president of the West Virginia Academy of General Practice and president of the Kanawha County Academy of General Practice. He was an active member of the WVSMA, and served as chairman of the Program Committee for the Annual Meeting in 1971.

Dr. Hall was a member of Village Chapel Presbyterian Church, Beni Kedem Shrine, Scottish Rite Bodies and the Salina Lodge.

Married to the late Virginia Eastman Hall, Dr. Hall is survived by sons, Dr. Randolph Hall of Raleigh, N.C.; Carl B. Hall Jr. of Charleston; John E. Hall of Austin, Texas; daughter, Jane Eastman Hall Ley of Englewood, Col.; seven grandchildren; six great grandchildren; sisters, Esculene Smith of Williamson and Ernestine Gedel of Charleston.

Memorial contributions may be made to the American Academy of Family Physicians.

*(This article is compiled from articles which appeared in the Charleston Daily Mail.)*

## Edward Ting Liu, M.D.

Edward Ting Liu, M.D., 65, of Beckley, died Aug. 3 after a short illness.

Dr. Liu was born in Manila, Philippines, the son of the late Kiam Tek Liu and Siu Ty Ting Liu. He graduated from the University of the Philippines Medical School in 1958 and interned at Menorah Medical Center at the University of Kansas in 1959. He completed his graduate studies at the Graduate School of Medicine at the University of Pennsylvania in Philadelphia in 1960.

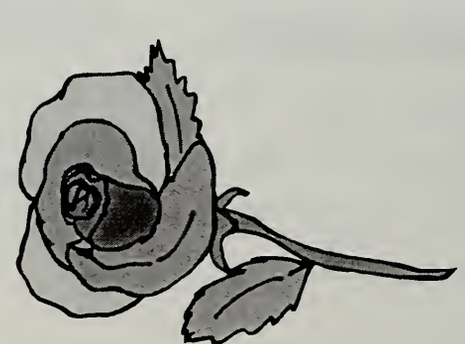
Dr. Liu remained in the Philadelphia area and completed his perceptorship at Wills Eye Hospital in 1961, going on to finish his residency at Temple University Hospital in 1964. He practiced in Canada and North Dakota before moving to Beckley.

For the past 31 years, Dr. Liu has worked as a Beckley ophthalmologist and had served as a consulting ophthalmologist for the United States Armed Forces and the United States Veterans Affairs. He practiced at Beckley Appalachian Regional Hospital, Raleigh General Hospital, Veterans Administration Medical Center and Beckley Hospital.

In addition to being a member of the WVSMA, Dr. Liu was a member of the Raleigh County Medical Society and the AMA. He was a fellow of the American Academy of Ophthalmology and was board certified by the American Board of Ophthalmology. He was a past president of the medical staff at Beckley Appalachian Regional Hospital.

Dr. Liu was a member of the Crab Orchard-MacArthur Lions Club and a member of the First Christian Church where he served as a deacon.

Dr. Liu was preceded in death by two of his brothers, Hans T. and Alfred Liu. He is survived by his wife of 30 years, Karman L. Liu; two daughters, Stephanie Nicole of Falls Church, Va., and Ashley Diane of Blacksburg, Va.; his brothers Jose of Bayside, N.Y., and Daniel of Manila, Philippines; his sister, Nellie Co of Toronto, Canada; and numerous nieces and nephews.



# David H. Smith, M.D.

Dr. David H. Smith, 77, a Wheeling psychiatrist for 35 years, died Aug. 9 at home.

Dr. Smith was born in Frank, Alberta, Canada, and was the son of the late Dennis and Margaret Hull Smith. He joined Royal Canadian Navy at the age of 17 and served in the Atlantic, Mediterranean and Pacific theaters of World War II. He was discharged from the service in April 1946 after earning several medals.

Dr. Smith received a B.S. degree and his medical degree from the University of Alberta in Edmonton, Alberta, Canada. He served an internship at Edmonton General Hospital and then immigrated to the U.S. in 1954 with his wife and two daughters.

In the U.S., Dr. Smith completed his internship and residency and earned his board certification in psychiatry and neurology in 1959. In 1961, he joined the staffs of the Wheeling Clinic; Ohio Valley General Hospital, predecessor of Ohio Valley Medical Center; Wheeling Hospital and the former Martins Ferry Hospital, which is now known as East Ohio Regional Hospital.

In addition to his full-time practice, Dr. Smith taught courses in psychiatry for the nursing program at OVMC and at West Virginia University, and served as a counselor at the former Good Shepherd Home for Girls. In March 1988, Smith retired from the Wheeling Clinic and subsequently joined the staff at Healthway in Weirton, where he was clinical director until he retired in March 1998.

Dr. Smith founded the organization MERGE, a support group to help mentally ill patients merge back into society. He was active in pro-life groups and was the founder of the Respect for Life Organization at St. Vincent de Paul Catholic Church. He was a hospice volunteer and also formed evangelization teams that ministered throughout the neighborhoods of Wheeling.

Dr. Smith was one of the first residents from the Ohio Valley to complete the Boston Marathon, which he ran at the age of 52 and again at age 53, finishing third in his age group.

In addition to his parents, Dr. Smith was preceded in death by three brothers, Arnold, Clarence and Robert Smith; and two sisters, Evelyn Carrier and Nell Peterson. Surviving are his wife of 49 years, Beverly K. Smith; three sons, Scott R., and his wife, Holli Massey, of Wheeling, Sean G. Smith of Orlando, Fla., and Duane T. Smith of Klamath, Calif.; four daughters, Beverly J. Smith, M.D., Robyn Hammond and her husband, David M., Ph.D., Lisa M. Smith, all of Wheeling and Pamela K. Smith, Ph.D., of Durango, Colo.; a sister, Isabel Jones of Alberta, Canada; seven grandchildren, Lauren, Natalie, Derek and Morgan Smith, and Michael, Andrew and David Sebastian Hammond.

Memorial contributions may be made to the West Virginians for Life, Ohio County Chapter, in care of Marcella Conti, 1123 National Road, Wheeling, WV 26003 or to the Gabrielle Project, P.O. Box 6207, Wheeling, WV 26003.

# Classified

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The names and addresses of the publisher, editor and managing editor are: Publisher, WV State Medical Association, Box 4106, Charleston, WV 25364; Editor, F. Thomas Sporck, M.D., P. O. Box 4106, Charleston, WV 25364; and Managing Editor, Nancy L. Hill, P.O. Box 4106, Charleston, WV 25364.

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I certify that the statements made by me above are correct and complete.

Signed Nancy L. Hill
Managing Editor


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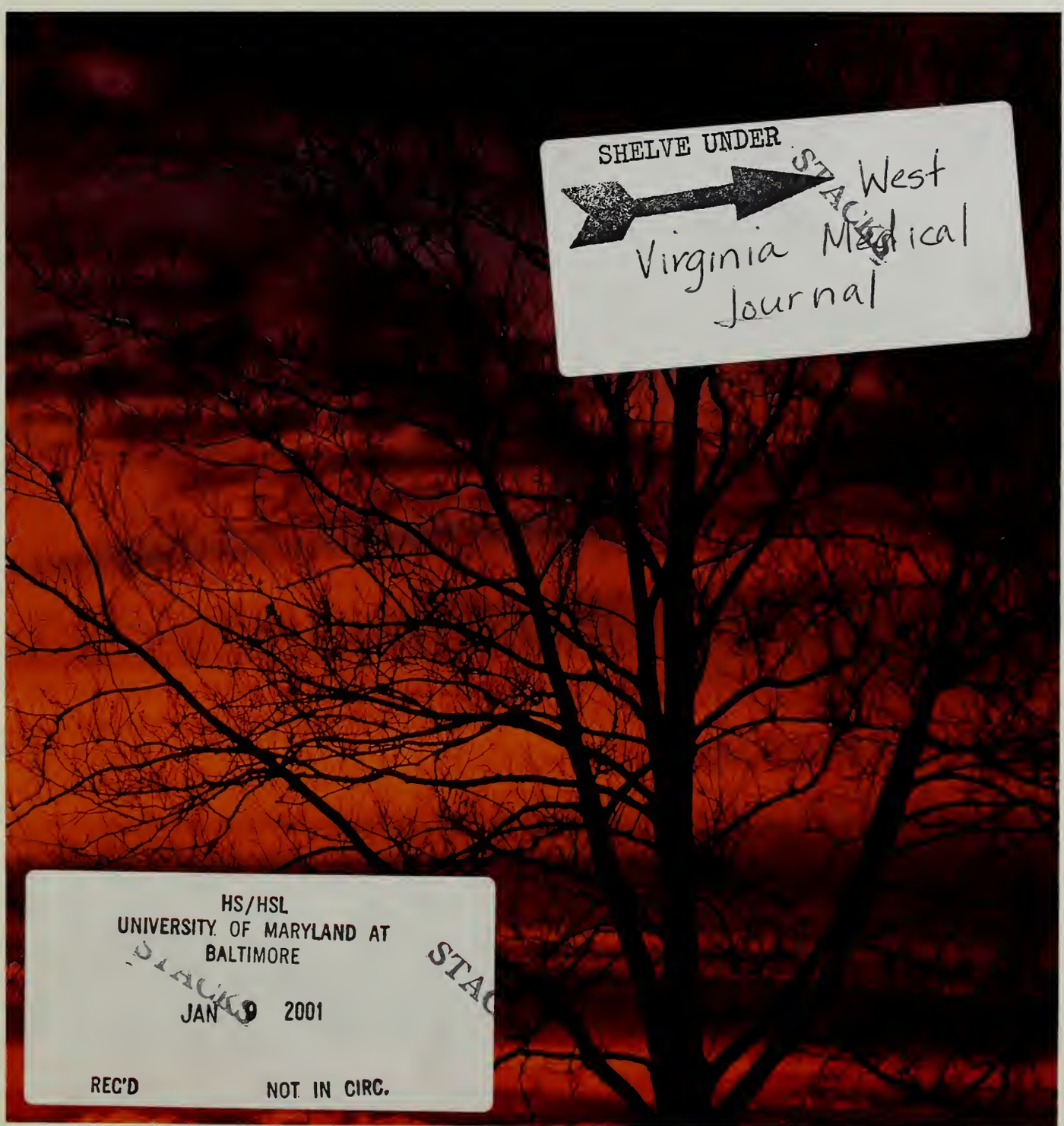


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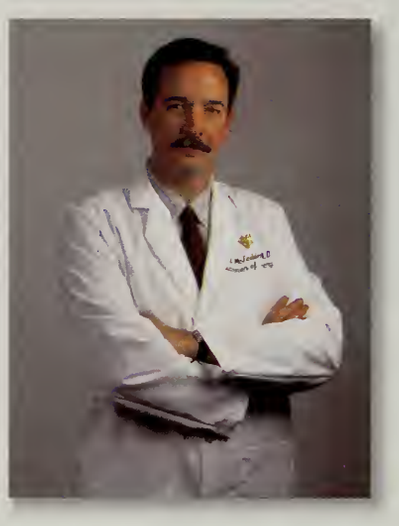
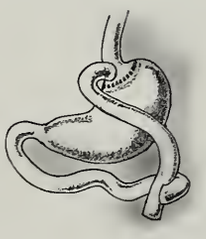


David W. McFadden, MD
*Dr. McFadden is Chair of the Department of Surgery at West Virginia University. He has special expertise in gastrointestinal and laparoscopic surgery.*

Jack Bergstein, MD
*Dr. Bergstein is a professor of surgery and director of the obesity surgery program at West Virginia University. He has particular expertise with the Roux en Y gastric bypass procedure.*

Obesity is a serious health hazard. Someone who is 40 percent overweight is twice as likely to die prematurely as a person of average weight. Experience has proven that medical weight reduction programs benefit less than five percent of the obese population. For the other 95 percent, bariatric surgery may be an option, one that has been approved by a recent NIH consensus conference.



*WVU surgeons currently offer the Roux en Y gastric bypass procedure, considered the state-of-the-art operation for reliable and lasting weight loss with minimal complication.*

If the risk of remaining obese is greater than short- or long-term risks of surgery, you may recommend that your obese patients be evaluated for bariatric surgery at West Virginia University. If patients are well informed, motivated, and have acceptable operative risks, they'll be considered for bariatric surgery and long-term follow-up. Minimally invasive (laparoscopic or laparoscopic-assisted) techniques are currently available for select patients.

For more information, contact the bariatric surgery specialists at West Virginia University at 800-WVA-MARS.

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Robert C. Byrd Health Sciences Center of WVU/
Charleston Division, 4th Floor
Charleston, WV

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March 9, 2001
March 30, 2001
May 4, 2001
June 8, 2001
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Charleston Division, 4th Floor
Charleston, WV

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April 20-21, 2001
May 16-17, 2001
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Camcare Institute
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Charleston, WV

**Pediatric Advanced Life Support Renewal Course**
March 21, 2001
April 22, 2001
8 a.m. to 4:30 p.m.
Camcare Institute
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Charleston, WV

## Outreach Programs

**New Treatment in Cancer Surgery**
Jan. 3, 2001
12:15 p.m.
Montgomery General Hospital
Montgomery, WV
*Michael Covelli, MD*

**Informed Consent**
Jan. 3, 2001
6 p.m.
Fayette County Medical Society
Plateau Medical Center
Oak Hill, WV
*Cheryl Eiffert, CAMC Attorney*

**Vasculitis**
Jan. 17, 2001
Noon
Plateau Medical Center
Oak Hill, WV
*John W. Byrd, MD*

Camcare Health Education and Research Institute

MEDICAL JOURNAL
West Virginia State Medical Association

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***On The Cover***

*A winter sunrise in Martinsburg.*

*Photo by Peter G. Teichman, M.D., M.P.A., of Harpers Ferry Family Practice, Harpers Ferry, W.Va.*

*Graphics Design by Joel Sites, Chapman Printing*

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# Manuscript Guidelines

All articles for the *West Virginia Medical Journal* must be submitted on an IBM compatible disk. Microsoft Word 97 is preferred, but other languages are acceptable. If the manuscript contains tables, the main body of the manuscript and references should be saved as one item, i.e., *article*, and then each table should also be saved as a separate item, i.e., *Table 1, Table 2.*

All scientific manuscripts should be prepared in accordance with *"Uniform Requirements for Manuscripts Submitted to Biomedical Journals."* Papers will not be considered for publication if they have already been published or are described in a manuscript submitted or accepted for publication elsewhere. All persons designated as authors should have participated enough in the work to take public responsibility for the concept.

Manuscripts should be accompanied by one extra copy, be double-spaced, have each page numbered and should include a title page, an abstract of no more than 150 words, and references numbered consecutively. No more than 10 references will be published and then a statement will appear that the author should be contacted for the other references listed in the manuscript.

Tables, figures and photos should be numbered, and indicated with parentheses whenever they are mentioned in the text, i.e. (Table 1), (Figure 1). Legends should be included for all figures and photographs.

Photos must be unmounted glossy prints in a 5 x 7 format or smaller. Black and white photos are preferred. Cost of printing photos in excess of four will be billed to the author at a cost of $13 for each photo. Each photo should have a label pasted on its back indicating its number, the author's name and an indication of its "top." Do not write on the back of photos, scratch or mar them with paper clips. Drawings and charts should be created in black and white.

All scientific material is reviewed by the editor and three other members of the Publication Committee. Special articles or reports are usually only reviewed by the editor. All articles should be addressed to:

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If you have questions or need more information, phone Nancy L. Hill, managing editor at (304) 925-0342.

# President's Page

## The awakening of a sleeping giant

In my inaugural address when I became president of the WVSMA, I borrowed a phrase used by Dr. Randy Smoak, president of the American Medical Association, when I described the medical profession in West Virginia as a sleeping giant. Physicians and other members of the health care community have not taken advantage of our considerable talents and resources.

I am thrilled to say that this sleeping giant is not only awake — it is roaring! After a terrific meeting in November, I see this in the members of the WVSMA Executive Committee and Council. I see this in the WVSMA membership and I see this in the Alliance as I have the privilege to visit component societies around the state.

Clearly, this new energy is the result of physician outrage over the state's liability crisis due to the outrageous frequency of lawsuits, shock verdicts and huge premium increases for liability insurance. Our message is firm and clear and is being heard. Physicians cannot continue to practice in West Virginia under these conditions that threaten us and our families, and adversely effect health care delivery to our patients.

The WVSMA has taken a leadership role in organizing health care and business groups to attack these problems. I am particularly pleased to see how committed the WVSMA staff is to advocating on our behalf with the media, the members of the Legislature and the incoming administration.

There are signs that things are starting to improve as demonstrated by the correct decision made by the West Virginia Supreme Court of Appeals to preserve the cap on non-economic damages. This narrow victory (3-2) is a reminder of the need to make sure at the next election for a justice for the Supreme Court that West Virginia physicians use all their resources to elect a fair-minded judge as was accomplished by the physicians of the Northern Panhandle at the Circuit Court level.

I cannot overemphasize the need for the participation of every physician in West Virginia to achieve success. We need to continue our strong and united membership in the WVSMA. Each member will soon receive a supply of highly effective advocacy resource materials on the liability crisis to share our message with patients, elected officials, local media, civic and business groups, and even with physicians who are sitting on the sidelines. In addition, WESPAC contributions are needed to increase our effectiveness at the Legislature. (I just mailed in my $1,000 contribution.)

Now is the time to make the plan to close your office and prepare to participate in White Coat Day on February 20 as well as attend the legislative briefings and our Legislative Reception on February 19. *(Please take time to read page 611 for a complete schedule of special Legislative events planned for 2001.)* Think how loud your message will be in your local community if a majority of physicians are away from their practices for a couple of days. Think how loud the roar of hundreds and hundreds of physicians, spouses, and other health care workers can be at a rally in the halls of the Capitol.

Now that the medical profession giant is awake and strong, I am optimistic that we can over time achieve great strides to make West Virginia an attractive place to practice medicine. Let us keep the pride in our profession and our commitment to provide the best health care to our patients.

Please feel free to contact me if you have any comments or suggestions. Best wishes for a happy and healthy 2001.

John D. Holloway, M.D., F.A.C.P.

# Editorial

## The malpractice crisis

Once again we find ourselves in the midst of a crisis in the availability and affordability of malpractice insurance. We have been unable to pass any tort reform measures since 1986. The cap which was passed then was recently challenged and upheld in the state Supreme Court.

Last week, I spoke with a colleague in North Carolina. He heads a residency program and does what are considered to be all the high-risk procedures in our specialty. His premium to do all this is about 2/3 less than what my partners and I are paying for just general ENT.

Why the difference?

A general surgery colleague here in Charleston was recently sued for leaving a clamp in the abdominal cavity. The suit was dropped after a CT scan showed no evidence of a foreign body. Nevertheless, this litigation proceeded as far as taking depositions. In addition, at the time it was filed, this suit engendered a newspaper article naming the physician and the alleged details, but there was no follow-up article to say this surgeon had been cleared of all charges.

To add injury to insult, this surgeon has been tagged with a 25% surcharge on his premium, not because of judgments against him, but because of frivolous suits filed against him. I know there are defense costs on frivolous suits, but this seems a bit excessive.

Why are incidents like this so common in West Virginia? Other states seemed to have tamed the litigation tiger -- it's time we do it!

We must aggressively pursue a broad package liability reform in the coming legislative session. If we fail, I foresee a large increase in premature retirement and an inability to recruit replacements for the doctors. This will create a very real crisis of availability of care.

We must realize that any tort reform legislation will have to survive a court challenge. Beyond that, insurance carriers will want to have 2-3 years of experience before they adjust rates down.

There is one area where the Legislature could give immediate relief to help cushion the impact of these huge premium increases. They could rapidly and completely repeal the Medicaid provider tax!

F. Thomas Sporck, M.D., F.A.C.S.

# Letters To The Editor

## Influenza: A public health leadership meltdown

**Editor's Note:** ***Dr. Felsen and the members of the Kanawha County Medical Society submitted a resolution regarding the influenza vaccine situation which was presented at the recent AMA Interim Meeting in Orlando by the WVSMA delegation. Seven other resolutions were presented on this subject from other medical societies in the nation. The AMA Resolutions Committee combined all of the resolutions into one which was passed by the AMA House of Delegates.***

Influenza is a serious disease that results in the death of 20,000 high-risk Americans annually as well as significant economic costs associated with preventable morbidity, hospitalizations, and lost productivity. An effective and inexpensive vaccine to protect against such mortality and morbidity is available.

Certain production problems created a shortage and delay in the initial 2000 supply of vaccine available this fall. In consideration of this shortage and delay, national and state public health officials encouraged health institutions and practitioners to assure only the highest risk individuals initially received this vaccine. Local institutions and practitioners instituted necessary measures to abide by these admonitions.

The heightened publicity about this subject increased awareness among high-risk individuals and their families concerning the prudence of receiving this vaccine and the demand to receive it. This was a positive development from the public health perspective.

In early October, commercial establishments began offering influenza immunizations to the general public as a "promotional" item regardless of the medical risk status of these individuals. However, many practitioners and institutions who immunize high-risk individuals were still unable to obtain any vaccine - or an adequate initial supply of the vaccine - over one and one half months later.

There is evidence that long-term commitments to provide an initial supply of such vaccine to such practitioners and institutions by late October were rescinded as the market cost of the vaccine escalated.

For example, the Kanawha-Charleston Health Department (KCHD) immunizes approximately 10,000 - 15,000 individuals per year for influenza. It is estimated that well over 70% of these folks are in the highest-risk category. This year, the state of West Virginia committed 3,400 doses of vaccine to the KCHD. Over eight months ago, KCHD ordered directly an additional 14,000 doses from its usual supplier. About the first of November, KCHD received 1,700 doses from the state; these doses were used at various targeted institutions where the highest risk populations reside.

No vaccine had been received from KCHD's direct supplier by late November despite repeated assurances it would receive at least part of its order by late October. Its supplier claimed the manufacturer failed to provide promised shipments and would provide no further information when and if these shipments would be made.

In Kanawha County, once the public became aware in early October that the vaccine was available, the health department began receiving over 100 phone calls and visits per day requesting immunization information. When it was announced a few weeks later that the state had received some of its supply - and distributed some of it to KCHD - these calls and visits escalated to 200-400 per day. KCHD informed folks it would announce its general clinic schedule as soon as it received the first of its direct supply shipments (anticipated for the last week in October.) However, as noted, it was not able to do so.

By the second week of November, the situation had deteriorated. High-risk individuals and their families became anxious, distrustful and even hostile when they or their loved ones were unable to obtain the vaccine even though it was available to low-risk individuals in supermarkets as a promotional gimmick. They speculated that there must be an economic motive or some other factors at play and public health officials were just not being honest with them.

It was easy to explain the genesis and nature of the vaccine shortage and delay, but we were unable to offer any rational explanation for the irresponsible mal-distribution of the vaccine. Repeated communications from federal and state officials were not helpful. They offered many speculations for the possible distribution pattern, e.g., time of initial order, volume discounts, location, but no definitive information or solutions. Most distressing was that they informed us that this was a private commercial matter over which they had no control. They suggested we might contact local commercial "promotional" providers and seek their cooperation or escort "high-risk" folks to the front of the line at the few clinics that were operating. We found this response lacking and believe considerable more leadership was warranted.

The fact that national public health leaders profess they are impotent to act in this matter portends serious consequences for the nation in the event of a major public health event such as a serious epidemic or bio-terrorism assault. Physicians should be concerned. Directly and through their professional organizations they should contact national public health officials and

request that a full investigation of the distribution of vaccine be conducted. They should also request that these officials exercise their moral and professional leadership to assure the vaccine supply reaches those serving the highest risk populations in accordance with their own admonitions.

James D. Felsen, M.D., M.P.H.
Medical Director
Kanawha-Charleston Health Department

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# Medical care crisis looming in West Virginia

Recently, there have been several news stories about the declining number of new physicians being licensed in West Virginia and quite a few physicians retiring early. As an observer and a participant of West Virginia's medical scene for the last 25 years, I would like to offer a few observations in hoping that obvious solutions will be implemented.

In the old days, physicians slowed down but hardly ever completely retired until they were in their 70s. Today, it is common to see physicians who retire in their mid 50s and not because of poor health, but because of the occupational stress and expenses of running a practice. Most people enter medical school with the primary idea of helping people. When every new patient is seen as a potential new liability, it is easy to understand why physicians are not accepting new patients. As a primary care provider, I find that getting an appointment with a specialist in several branches of medicine takes a long wait and at times, cajoling.

Why are a significant majority of physicians in town today afraid to take new patients? The mean age of West Virginia physicians is 51 and the mean number of years in practice is 20. When these 50 plus physicians take their total practice income, subtract expenses, including malpractice (that in West Virginia is an average of four times higher than most other states in the U.S.), pay regular income taxes approaching 50¢ on a dollar and then compare that income to what they are doing with their investments, which are only taxed at 20%, the choice is obvious — give up the stress and hit the golf course. After all, we would rather not be in business for the sole purpose of supplying business to the lawyers.

Ever wonder why West Virginia keeps only 40% of its medical school graduates while the rest seek more favorable climate in other states? Sometimes in my dreams I see a plane parked at Yeager Airport with "For Trial Lawyers Only " painted on the side. Since one out of two physicians in West Virginia are sued because of his "poor training and negligence," these lawyers with chest pain or injury could jump on their plane and go to Pennsylvania or Ohio, where they could get the best of care for themselves. There the rate of physicians being sued is 1 in 4 or 1 in 5.

How can you attract a new orthopedic surgeon to Charleston where he will be on call for major trauma every fourth night? Or attract a new neurologist when he would be on call to administer life-saving treatment to acute stroke victims if he has to be on call every second or third night?

If the current trend in malpractice litigation continues, I foresee a complete withdrawal of all carriers or malpractice premiums that are so high that they cannot be paid with existing fee schedules from health insurance carriers and medicare. Then you have wholesale shutdown of services by medical providers afraid to lose everything they have worked for. I am aware of at least two physicians who have left medicine to practice law in Charleston which has just 400 or so physicians. One in particular loves to be quoted in the media as a doctor/lawyer. If you look at his 1040 on line 7 for sources of income, he should be listed as LAWYER/doctor. I'm not aware of a single lawyer out of 2,000 that have made similar career change to medicine.

Our best and brightest kids today are leaving medical career choices out of their future as witnessed by the declining applications for admission to medical schools in the state. Maybe there is a method to this madness, because that way trial lawyers can find more fault with medical practitioners.

West Virginia wake up! Selfish trial lawyers are leaving you to suffer. If you don't realize this, it may already be too late because no new physicians will be coming here to practice and the older ones will have left or will not be taking new patients. If you have a great auto insurance policy but no repair shops in town, what good is having a great policy? Ditto for health insurance.

Now, if you don't think the picture I have already painted is bad enough, add to it the shortage of nurses and other allied health care profesionals in the state.

Bipin H. Avashia, M.D.
Charleston

Special Article

# Breast cancer risks and prevention: Implications of the Breast Cancer Prevention Trial Results

**EDWARD B. CROWELL JR., M.D.**
*Mary Babb Randolph Cancer Center; Professor, Dept. of Medicine, Section of Hematology/Oncology; West Virginia University School of Medicine, Morgantown*

**STEVEN J. JUBELIRER, M.D.**
*Senior Research Scientist, CAMCARE Health Education Research Instiitute; Clinical Professor, Dept. of Medicine, West Virginia University School of Medicine, Charleston Division, Charleston*

## Abstract

***Breast cancer is a major health concern for women in the U.S. Several factors determine a woman's risk for developing breast cancer including age, genetics, hormonal exposure and others. It is possible to estimate a woman's risk for developing breast cancer by using a statistical model known as the Gail model. Using this model, the Breast Cancer Prevention Trial (BCPT) found that women at high risk for breast cancer could have their incidence of breast cancer reduced by 49% by taking tamoxifen. The serious side effects of tamoxifen therapy were almost exclusively seen in women over age 50. Women under 50 with a high risk of breast cancer are, therefore, most likely to benefit from taking tamoxifen for five years. Thus, a benefit-to-risk estimate should be made for each woman before advising her to take tamoxifen. A new trial (Study of Tamoxifen And Raloxifene, STAR) will compare tamoxifen with raloxifene for their effectiveness in reducing breast cancer and for side effects. West Virginia women participated in the BCPT and will be able to participate in the STAR trial through centers in Morgantown and Charleston.***

## Introduction

Breast cancer continues to be a major public health problem in the U.S., the annual incidence being more than twice that of any other cancer in women and the annual death rate more than 43,000 (1). Identifying risk factors for breast cancer and finding ways to reduce the incidence and mortality are, therefore, major concerns.

The BCPT, begun by the National Cancer Institute (NCI) and the National Surgical Adjuvant Breast and Bowel Project (NSABP) in 1992, has now demonstrated that tamoxifen reduces the incidence of invasive breast cancer by 49 percent in women who are at high risk for this disease (2). Tamoxifen use is, however, associated with several adverse effects. The incidence of endometrial cancer, venous thromboses, pulmonary embolism and cataracts is higher in women on tamoxifen than in controls. It is necessary, therefore, to be able to carefully assess women for their breast cancer risk, and for their risk of taking tamoxifen, in order to determine which women would likely benefit from taking this drug.

In this article, we review the known risk factors for breast cancer and discuss how to estimate a woman's future risk of developing this disease. We also review the results of the BCPT to see how this data may be used in advising women on the use of tamoxifen to prevent breast cancer.

## Breast cancer risk factors

Six main categories of risk factors for breast cancer are age, genetic, environmental, lifestyle, hormal and having a breast biopsy (Table 1).

Age is the strongest risk factor. The annual incidence of breast cancer rises from 60 to 450 per 100,000 women, between the ages of 35 and 75 respectively (3). The BCPT used the risk for women aged 60 as the minimum risk for a woman to be eligible to participate in the trial. This is a 1.66-percent risk of developing breast cancer over a five-year period.

A genetic risk for breast cancer may be suspected when a woman has one or more blood relatives with the disease. This is especially true when she has an affected first-degree relative (mother, sister or daughter) with breast cancer. The risk is higher still if the relative was premenopausal when the disease developed or had bilateral disease. Tables have been published by Claus et al (4) that give the cumulative risk for developing breast cancer for a woman who has one or two relatives with the disease, according to the age of the affected relative(s) and the degree of relationship. These may be useful when counseling a woman who has a strong family

**Table 1. Risk Factors for Breast Cancer.**

| |
|---|
| **Age** |
| **Genetic** |
| **Environmental** |
| **Lifestyle** |
| **Hormonal** |
| **Having a breast biopsy** |

history of breast cancer. However, most women with breast cancer have no family history of the disease.

The incidence of breast cancer varies in different countries, and the increase that occurs after a few generations in descendants of immigrants who come to the U.S. from a country with low incidence indicates that environmental factors play a role in breast cancer. These are probably multifactorial, however, and are poorly understood. One very important environmental factor is exposure of the breast to radiation, especially at a young age. Radiation exposure before age 40 increases risk in a dose-related fashion with the greatest risk occurring in those who are exposed during adolescence (5).

Lifestyle risk factors include diet, alcohol intake and exercise. Reducing fat intake does not seem to reduce risk and obesity increases breast cancer risk only in postmenopausal women. Caloric restriction during adolescence reduces breast cancer risk in humans as it does in animal models. Alcohol intake produces a modest, but dose-related, increased risk of breast cancer: one, two or three drinks a day producing relative risks of 1.11, 1.24 and 1.38 respectively (6). In counseling a woman, this risk should be balanced against any beneficial effects on cardiovascular events that alcohol might produce. Exercise has been shown to reduce the risk of breast cancer, with more than four hours of exercise a week reducing the risk up to 50 percent (7).

Exposure to estrogens increases the risk of breast cancer. Early menarche and late menopause both increase risk, as does older age at first pregnancy and nulliparity. The role of exogenous estrogens in raising breast cancer risk is controversial, but it is probable that long-term exposure to unconjugated estrogens (e.g. estradiol) may increase risk (8).

Benign breast disease, per se, does not predispose to breast cancer but having a breast biopsy statistically increases the risk of breast cancer. The relative risk is 2.9 for women under age 50 but only 1.6 for those over 50. If atypical hyperplasia is found in the breast, however, the risk increases further by twofold (9).

## Estimating a woman's risk

The Gail model for estimating breast cancer risk is one that is well known and has been verified (9). Its variables are listed in Table 2.

This model applies to the general population and takes into account all of the risk factors previously discussed except environment and lifestyle. The Gail model, modified slightly by adding a factor for race, was used to determine eligibility for the BCPT. The NCI is making this program available on a computer disk for physicians to use in estimating a woman's risk (call NCI at 1-800-4-CANCER to obtain a disk). A hand-held "slide-rule" type tool is also available from Astra-Zeneca, the makers of tamoxifen.

Since the Gail model does not take into consideration the age of a relative with breast cancer or whether she had bilateral disease, it may underestimate risk in a woman with a history suggestive of familial breast cancer. The use of the tables by Claus may be more helpful in such situations although, again, bilateral disease is not taken into account.

## The BCPT

From June 1,1992, to Sept. 30, 1997, 13,388 women 35 years of age or older, who were at high risk for breast cancer, were randomized to receive either tamoxifen 20 mg/day or a placebo for five years. Of these women, 100 were from West Virginia.

Any woman age 60 or over was considered to be at high risk, as were women whose risk was 1.66 in the next five years calculated by the Gail model. In addition, any woman who had had lobular carcinoma *in situ* (LCIS) was eligible for this trial. Women who had a history of pulmonary embolism or deep venous thrombosis or who were on coumadin were not eligible to participate. Tamoxifen was chosen as the chemopreventative agent in view of its ability to decrease the incidence of new contralateral breast cancer when it was used in adjuvant therapy trials for breast cancer (2).

The study was stopped early in March 1998 on the recommendation of an independent monitoring committee after an interim analysis of the results. The median follow-up time was 54.6 months, and 25 percent of women had taken their pills for the planned five years.

The published results (Table 3) show that invasive breast cancer was reduced by 49 percent in the group of women who took tamoxifen compared to those who took the placebo (2). This reduction occurred in women of all age groups and in those at all levels of risk. The great majority of the women in the trial were between the ages of 40 and 70, and 75 percent of them had at least one relative with breast cancer. Breast cancer incidence was reduced in women who had had LCIS and there was a marked reduction in women who had had atypical hyperplasia in a breast biopsy.

All of the reduction in incidence was in breast cancers that were positive for estrogen receptors (ER) which constitute about three-quarters of all breast cancers. The frequency of ER negative breast cancers was not different between the two groups. There was also a reduction in non-invasive breast cancer (LCIS and ductal carcinoma *in situ* (DCIS) of 50 percent in the tamoxifen group compared to the controls.

Secondary endpoints of the study were to look at reduction in

**Table 2. Variables Used in the Gail Model for Breast Cancer Risk Assessment.**

**-Age**
**-Number of first degree relatives with breast cancer.**
**-Age at menarche**
**-Nulliparity or age at first live birth.**
**-Number of benign breast biopsies.**
**-The presence of atypical hyperplasia in a breast biopsy.**

**Table 3. Summary of results of the Breast Cancer Prevention Trial.**
***(Adapted from Fisher B, Constantino D, Wickerham DL, et al. J of the National Cancer Institute 1998;90:1371-88)***

| | Placebo | Tamoxifen | Risk Ratio | 95% Confidence Interval |
|---|---|---|---|---|
| Number of participants | 6707 | 6681 | | |
| Type of event | Number of Events | | | |
| *Invasive breast cancer* | 175 | 89 | 0.51 | 0.39-0.66 |
| </= 49 yr of age at entry | 68 | 38 | 0.56 | 0.37-0.85 |
| 50-59 yr of age at entry | 50 | 25 | 0.49 | 0.29-0.81 |
| >/= 60 yr of age at entry | 57 | 26 | 0.45 | 0.27-0.74 |
| *Endometrial cancer (invasive)* | 15 | 36 | 2.53 | 1.35-4.97 |
| </= 49 yr of age at entry | 8 | 9 | 1.21 | 0.41-3.60 |
| >/= 50 yr of age at entry | 7 | 27 | 4.01 | 1.70-10.50 |
| *Fractures (hip, spine, radius)* | 137 | 111 | 0.81 | 0.63-1.05 |
| </= 49 yr of age at entry | 23 | 20 | 0.88 | 0.46-1.68 |
| >/= 50 yr of age at entry | 114 | 91 | 0.79 | 0.60-1.05 |
| *Stroke* | 24 | 38 | 1.59 | 0.93-2.77 |
| </= 49 yr old | 4 | 3 | 0.76 | 0.11-4.49 |
| >/= 50 yr old | 20 | 35 | 1.75 | 0.98-3.20 |
| *Pulmonary embolism* | 6 | 18 | 3.01 | 1.15-9.27 |
| </= 49 yr old | 1 | 2 | 2.03 | 0.11-119.62 |
| >/= 50 yr old | 5 | 16 | 3.19 | 1.12-11.15 |
| Deep vein thrombosis | 22 | 35 | 1.60 | 0.91-2.86 |
| </= 49 yr old | 8 | 11 | 1.39 | 0.51-3.99 |
| >/= 50 yr old | 14 | 24 | 1.71 | 0.85-3.58 |

fractures related to osteoporosis and at cardiac events, since tamoxifen is reported to have positive estrogen-like effects on bone density and on cholesterol levels (10,11). Fractures were reduced in the women on tamoxifen, but this just missed being statistically significant. There was no difference in cardiac events between the two groups.

As expected, there was a higher incidence of endometrial carcinoma in the tamoxifen group, a 2.5 fold increase compared to the controls. There were also more deep venous thromboses, pulmonary emboli and cerebrovascular accidents in the tamoxifen group in keeping with its known estrogen-like effect on blood clotting. There was no significant difference in transient ischemic attacks between the groups. A small but significant increase in the rate of cataracts was found in the tamoxifen group and they had 1.5 times as many cataract operations as the control group.

The increased incidence of adverse advents was almost entirely confined to women over age 50. The mortality rate was not different between the tamoxifen group and the placebo group.

## Discussion

Contrary to initial expectations, a great majority of the women who entered the BCPT had at least one relative with breast cancer. This seems to indicate that having an experience with breast cancer in her family motivates a woman to seek to do something about her own breast cancer risk. It is likely that other women with a family history of breast cancer will now seek advice about whether they should take tamoxifen.

Counseling such women will require estimating both their breast cancer risk and their risk for

developing one of the adverse events associated with tamoxifen. Prophylactic tamoxifen should be considered for women age 35 or over since this was the age group studied in the trial. A woman in this age group may have her five-year risk of breast cancer calculated by her physician using the computer disk or the other tools available. If her five-year risk is over 1.66%, then tamoxifen may reduce her risk of breast cancer. Her risk of adverse effects from tamoxifen will be greater if she is over 50 and probably increases with age, but a woman who has had a hysterectomy will not have the risk of uterine cancer. In addition, any woman with a history of thromboembolic disease should not receive tamoxifen.

The decision to take tamoxifen will be easiest, therefore, for a woman under age 50, who has at least a 1.66- percent five-year risk of developing breast cancer. The higher a woman's risk of breast cancer the larger the benefit-to-risk ratio will be and the easier the decision to take tamoxifen. However, balancing risks versus benefits requires weighing the significance of each. For example, endometrial cancer may not be considered equal to breast cancer since the former is more easily treated and the results more often successful. The concern about blood clots and cataracts will be different for different women and will depend on other factors such as smoking, diabetes and hypertension. The decision, therefore, will be an individual one for each woman and depend on her concern about and level of risk for breast cancer and her tolerance for the risk of side effects. A recent paper by Gail et al gives guidelines for weighing the risks and benefits of using tamoxifen to prevent breast cancer (12).

Although breast cancer risk is reduced by tamoxifen, the question may be raised as to whether this benefit will last after tamoxifen is stopped. In adjuvant trials, when tamoxifen was given for five years or less, the curves of disease-free survival and survival continued to remain parallel, or further diverged, for five to 10 years after the tamoxifen was stopped. One explanation for this is that tamoxifen may have been eradicating small, clinically undetectable, foci of hormone-sensitive breast cancer. This may be the mechanism of tamoxifen's effect in the prevention trial also. We will need to wait to see if the benefit persists in the BCPT, of course.

Although we now have the ability to reduce the incidence of breast cancer in a significant proportion of women who are at high risk for this disease, the risks associated with tamoxifen use have encouraged investigators to look further for a possibly better agent. The STAR trial has now been opened in which tamoxifen is being compared with raloxifene both with regard to efficacy in preventing breast cancer and the risks associated with each drug. This study is restricted to postmenopausal women as raloxifene is only approved for use in such women and the details of this study are discussed in the next article that appears in this issue.

Any postmenopausal woman who is being considered for tamoxifen therapy may be referred for possible participation in the STAR trial by contacting the CAMCARE Education and Research Institute in Charleston at (304) 388-9940, the Mary Babb Randolph Cancer Center in Morgantown at (304) 293-3515, or the NCI at 1-800-4-CANCER. Follow-up during the study can be done by a family physician with information submitted to the appropriate study center in West Virginia.

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Special Article

# The STAR (Study of Tamoxifen and Raloxifene) Trial in West Virginia

**STEVEN J. JUBELIRER, M.D.**
*Senior Research Scientist, CAMCARE Health Education Research Institute; Clinical Professor, Dept. of Medicine, West Virginia University School of Medicine, Charleston Division, Charleston*

**EDWARD B. CROWELL, JR., MD**
*Mary Babb Randolph Cancer Center; Professor, Dept. of Medicine, Section of Hematology/Oncology, West Virginia University School of Medicine, Morgantown, WV*

## Abstract

***Female breast cancer is a major medical problem with significant public health ramifications. In 1999, more than 170,000 women were diagnosed with breast cancer in the U.S. and more than 40,000 died from this disease. The STAR trial will determine if raloxifene (Evista®) is either more or less effective than tamoxifen (Nolvadex®in reducing the incidence of invasive breast cancer in postmenopausal women who are at increased risk for the disease. A secondary goal is to compare raloxifene and tamoxifen with regard to their side effects. Approximately 22,000 postmenopausal women, 35 years of age or older, who are at increased risk for developing breast cancer will be randomly assigned in this double-blind trial to receive either 20 mg of tamoxifen plus a placebo or 60 mg of raloxifene plus a placebo, for five years. A substudy to evaluate the effect of raloxifene and tamoxifen therapy on study participants' quality-of-life will also be conducted.***

## Introduction

Breast cancer is a major medical problem with significant public health and societal ramifications. For several decades, the incidence of breast cancer in the U.S. has been slowly increasing. More than 170,000 women were diagnosed with breast cancer in the U.S. in 1999 and more than 40,000 died from the disease (1).

Worldwide approximately one million women will develop breast cancer each year and over 400,000 will die (2,3). In developed countries, although the incidence rates for breast cancer have been increasing, mortality rates have declined (4). Two major factors thought to contribute to this decline in mortality are the increased use of screening mammography, which results in breast cancer being diagnosed at earlier stages, and improved therapies including adjuvant chemotherapy and/or hormonal therapy.

In 1992, the National Cancer Institute (NCI) through the National Surgical Adjuvant Breast and Bowel Project (NSABP) initiated the first breast cancer prevention trial: The P-1 Study. This study evaluated whether five years of tamoxifen therapy given at 20 mg/day reduced the incidence of invasive breast cancer in women at increased risk for the disease and assessed tamoxifen's effect on ischemic heart disease and fractures. Approximately 100,000 women underwent risk assessment screening, and 13,388 were randomized into the trial.

The results demonstrated that tamoxifen reduced the risk of invasive breast cancer by 49% ($p < 0.00001$)(5). The decreased risk occurred in women of all ages and was especially effective in women with a history of atypical hyperplasia in a breast biopsy. In addition, tamoxifen reduced the risk of non-invasive breast cancer by 50% ($p <. 002$). Tamoxifen administration did not alter the average annual rate of ishemic heart disease but did demonstrate a reduction in fractures of the hip and spine and in Colles' fractures of the wrist.

The results of the NSABP P-1 trial has led the U.S. Food and Drug Administration (FDA) to approve the use of tamoxifen to "reduce the incidence of breast cancer in women at high risk" for this disease. These results, together with early reports on the effects of another selective estrogen receptor modulator (SERM), raloxifene (Evista; Eli Lilly and Company, Indianapolis, IN), have prompted the NCI, through the NSABP, to sponsor a second cancer prevention study, the STAR (Study of Tamoxifen and Raloxifene for the Prevention of Breast Cancer) trial. This study will determine if raloxifene is either more or less effective than tamoxifen in reducing the incidence of invasive breast cancer in postmenopausal women who are at increased risk for the disease. A secondary goal is to determine whether side effects are different between the two drugs.

The David Lee Cancer Center at the Charleston Area Medical Center in Charleston and the Mary Babb Randolph Cancer Center of West Virginia University in Morgantown are jointly participating in this study along with 200 other centers in the U.S. and Canada. It is projected that 22,000 postmenopausal women 35 years of age or older who are at increased risk for the development of breast cancer will be entered in this trial, at least 100 of which will be from West Virginia.

## Toxicities of tamoxifen

A significant concern in any prevention trial studying healthy subjects is the toxicity of the intervention used. Extensive findings reported in the literature indicate that adverse reactions to tamoxifen are relatively rare and only infrequently severe enough to require discontinuing treatment. Probably the most comprehensive information regarding tamoxifen toxicity is from the NSABP P-1 trial.

In the P-1 Study, tamoxifen was shown to be associated with an increased rate of endometrial cancer (RR=2.53; 95% CI: 1.35-4.97)(5). The excess risk occurred almost exclusively in women 50 years of age and older. At the time of the publication of the initial P-1 trial results, all endometrial cancers diagnosed in the tamoxifen-treated group were at stage I. No liver cancers were observed in the tamoxifen group. The rate of stroke, pulmonary embolism and deep-vein thrombosis were elevated in the tamoxifen group (5); the increase in these thrombotic events also occurred almost entirely in women ages 50 years or older.

A report of the tamoxifen ophthalmic evaluation study in the NSABP adjuvant study B-14 indicated that no cases of vision-threatening toxicity occurred among tamoxifen-treated women, although posterior subcapsular opacities were more frequently observed in the tamoxifen-treated group (6). In the P-1 trial (5), the rate of cataract development in women who were cataract-free at the time of randomization was marginally greater in those who took tamoxifen (21.72/1000 women in the placebo and 24.82/1000 women in the tamoxifen group). There was also a difference by treatment group with respect to cataract surgery. In the placebo and tamoxifen groups, the rate of undergoing cataract surgery was 3.0 and 4.72/1000 women, respectively (RR=1.75).

The only difference noted between placebo and tamoxifen-treated groups with respect to quality of life assessments were related to hot flashes and vaginal discharge both of which occurred more frequently in the tamoxifen-treated group (5)(45% vs. 28% and 29% vs. 13% respectively). No other differences between the groups were identified through the various self-reporting instruments used such as the sexual functioning scale and self-administered depression scale developed by the Center for Epidemiologic Studies (CES-D)(5).

## Evaluating Raloxifene

Raloxifene hydrochloride is a selective estrogen receptor modulator, chemically distinct from tamoxifen and estradiol. It binds to estrogen receptors to competitively block estrogen-induced DNA transcription in the breast and endometrium (7, 8). In animal studies, raloxifene inhibits estrogen-stimulated growth of mammary cancers (9,10) and antagonizes the mitogenic effects of both estrogen and tamoxifen in the uterus (11).

In the multiple outcomes of raloxifene evaluation (MORE) study published by Cummings et al (12), 7,705 post menopausal women with a mean age of 66.5 years who had documented osteoporosis and no history of breast cancer were randomized to receive raloxifene, either 60mg/day or 120 mg/day, or a matching placebo. The primary endpoint of the MORE trial was fracture, but breast cancer incidence was a secondary endpoint. Within a median of 40 months of follow-up, invasive breast cancer was reported in 40 women of the 7,705 women originally enrolled in the study. Thirteen cases of invasive breast cancer were confirmed in the 5,129 women assigned to take raloxifene and 27 in the 2,576 women assigned to take placebo (RR, 0.24; 95% C1, 0.13-0.44; P < .001).

At the 1998 American Society of Clinical Oncology meeting (13) Jordan et al reported on safety data obtained from fully enrolled osteoporosis studies, including the MORE trial which represented 14,800 patient years of cumulative exposure to raloxifene — a median overall exposure of 28 months. In concert, these studies continued to demonstrate, as the MORE trial did, a statistically significant reduction in newly diagnosed breast cancers. Reductions like this occurred in both estrogen and progesterone positive tumors.

The safety of raloxifene has been carefully evaluated. To date, only three categories of adverse events, venous thromboembolism, vasodilatation (i.e. hot flashes) and leg cramps are believed to be related to therapy with the drug. The excess risk of venous thromboembolism related to raloxifene is modest (about three-fold higher overall than the risk without therapy) and is similar to the risk observed during hormone replacement therapy. The excess risk of hot flashes is small (about 7% more reports occur among early post menopausal women on raloxifene than among those on placebo; and the hot flash episodes are infrequently reported as severe and only infrequently lead to the discontinuation of therapy. The leg cramps associated with raloxifene are the idiopathic type and were reported infrequently in all therapy groups.

Preclinical studies (14) suggest that raloxifene may have limited effects on endometrial proliferation. Information regarding the influence of raloxifene on the endometrium in humans is now becoming available. In several clinical reports, endometrial thickness was unchanged during raloxifene therapy at doses up to 150 mg/day compared with placebo (15,16). In the MORE trial, raloxifene did not increase the risk of endometrial cancer (RR, 0.8;95% C1, 0.2-2.7)(12).

Definitive assessment of the clinical influence of raloxifene on endometrial cancer awaits the maturation of results from ongoing randomized trials.

## Conduct of the trial

When an eligible participant agrees to enter the study, she will be randomized to receive either tamoxifen or raloxifene. Each participant will take two tablets daily; one with active medication and one placebo.
Two placebo tablets will be used in this trial: one tamoxifen look-alike and one raloxifene look-alike. This is necessary to mask the therapy assignment from both the

participant and the investigator. Thus, participants will receive either:

a) Tamoxifen (20 mg/day) plus a placebo, which contains the inert ingredients from the raloxifene tablet, for a duration of five years; or
b) Raloxifene (60 mg/day) plus a placebo, which contains the inert ingredients from the tamoxifen tablet, for a duration of five years.

Before entering the study, participants will have a physical exam and the following studies:

1. Mammogram within 365 days prior to randomization
2. Blood tests including complete blood count, liver chemistries and serum creatinine
3. Pelvic exam (if not done within 12 months prior to the study).
4. Completion of a symptom check list.

During the first year of the study, participants will return for follow-up at three, six, and 12 months. They will then be followed every six months through year five. After the fifth year, they will be followed annually.

At each visit, participants will have a clinical breast exam. A mammogram, gynecological exam and blood tests will be performed annually during the study. These exams may be done by the woman's own physician and the results given to the study center in West Virginia.

## Eligibility requirements

Participants must be 35 years of age or older, must be postmenopausal and must have an increased risk for developing breast cancer. They must meet one of the following criteria that will be used to define increased risk for breast cancer:

1) age > 35 years with a histologic diagnosis of lobular carcinoma *in situ* (LCIS) treated by local excision only; or
2) a minimum projected five-year probability of invasive breast cancer of at least 1.66%; as determined from the Breast Cancer Risk Assessment Profile generated by the NSABP Biostatistical Center. This risk is based on the following factors:

- Age;
- Number of first-degree female relatives with breast cancer;
- One or more previous breast biopsies;
- Previous diagnosis of atypical hyperplasia of the breast;
- Age at first live birth;
- Race; and
- Age at onset of menarche.

Any of the following conditions render the potential participant ineligible for this study:

1) Age less than 35 years;
2) Prior or suspected invasive breast cancer;
3) Ductal carcinoma in-situ (DCIS);
4) Previous LCIS treated by mastectomy or systemic adjuvant therapy;
5) Bilateral or unilateral prophylactic mastectomy;
6) Prior history of deep-vein thrombosis or pulmonary embolus;
7) Prior history of documented cerebral vascular accident or documented transient ischemic attack;
8) Estrogen or progesterone-replacement therapy; *(women who discontinue these drugs at least 3 months prior to randomization will be eligible).*

Women interested in participating or obtaining more information may phone the CAMCARE Education and Research Institute at (304) 388-9940, the Mary Babb Randolph Cancer Center at (304) 293-3515 or the NCI at 1-800-4-CANCER. Participation in this study will hopefully contribute to the control of breast cancer and perhaps reduce coronary heart disease and osteoporotic fractures in women as well.

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***(Please contact the first author for the other references in this article.)***

Special Report

# The West Virginia Coalition for Quality Health Care: Reducing variation and improving care

**DEBORAH H. RUPPERT, R.N.**
*Project Director, West Virginia Coalition for Quality Health Care, Charleston*

**JOHN COMBES, M.D.**
*Clinical Advisor, Harrisburg, Pa.*

The West Virginia Coalition for Quality Health Care was formed in late 1997 to create a sustainable framework for addressing the question, *"What care is right in the state of West Virginia?"* While most observers believe that wide variations in care are inappropriate, the "right rate" of most surgical and medical interventions has not been established. Default logic tells us that lower rates are better, but it is important not to assume that high rates are too high and that low rates are too low or better. These faulty assumptions tend to put physicians and hospitals in a defensive posture.

Many possible explanations exist for variation such as differences in the local populations, disease incidence and environmental factors that are not immediately apparent. Some of the variations in care may be related to differences in underlying disease, and some will reflect differences in patient preferences for treatment. Valid conclusions may not be drawn if it appears one rate is valued over another.

Establishing the "right rate" for most procedures and treatments may not be an attainable or reasonable goal. When physicians are provided with the results of outcomes research and evidence-based clinical guidelines, two complementary events will occur. First, by making physicians aware of this data, the variations will often begin to resolve. Second, these and other data can be used to develop information systems that patients can use in conjunction with their physicians to make informed choices about their medical care, choices that will be based upon the individual patient's preferences. This concept is known as "shared decision-making."

Ever-rising health care expenditures are in large part the story of the inability to rationalize the use of health resources and services. Health care providers have been struggling for 25 years to find a way to manage the appropriateness of care. Strategies have included utilization review committees, Professional Standards Review Organizations, Peer Review Organizations and managed care. Health care providers must continue to ask *"What care is right?"* and develop strategies to answer this question.

John E. Wennberg, M.D., M.P.H., of Dartmouth University was one of the first to try to attempt to answer this question. He pioneered the use of epidemiological methods to analyze health services, helping to create an industry of health services research that came to be known as Small Area Variation Analysis. This type of analysis is the comparison of the distribution of health resources and consumption of health services by geographically defined populations.

For nearly 30 years, Dr. Wennberg has documented both national and regional variations in the use of health care services and investigated their causes. He and his colleagues at Dartmouth identified 3,436 "natural markets" for the consumption of health services which they refer to as Hospital Service Areas. They are defined by where populations go for their acute care These are aggregated into 306 Hospital Referral Regions based upon where populations go for their specialty care, such as those involving cardiac and major neurological procedures. These documents indicate that the variations in the distribution and use rates of health care services observed by Dr. Wennberg exist throughout the nation.

In 1997, the American Hospital Association published the research of Dr. Wennberg and his colleagues as *The Dartmouth Atlas of Health Care*. It was the first national analysis of health care resources and utilization and it featured colored maps to show the wide variations in the distribution and use rates of health care services. *The Dartmouth Atlas of Health Care,* along with other data sources, make it possible to compare the clinical practice variations of health services for select conditions and procedures on both a national and local level.

Keeping in mind that the "right rate" of most surgical and medical interventions has not been established and may not be able to be established, a preliminary analysis of West Virginia data from *The Dartmouth Atlas of Health Care* shows wide variation and high use in a number of well-studied conditions. Some examples of these variations are as follows:

- Rates for resection of the prostate in WV vary fourfold across the state, from less than 7 per thousand to over 28 per thousand;
- Every Hospital Service Area in WV has admission rates for the "high variation medical conditions" that exceed the regional average. These are conditions that have a high amount of discretion and variability;

- Citizens of WV have a much higher than average chance of dying in a hospital bed rather than in their homes or hospices;
- Coronary artery bypass graft surgery rates in the Charleston Hospital Referral Region are 25 percent higher than in the Huntington or Morgantown Hospital Referral Regions.
- Breast sparing surgery is performed about 40 percent less frequently than the national average, and about 65 percent less frequently than in cities such as Boston or San Francisco.

Each of these variations raises this question: Consistent with the best scientific evidence and with their own values and preferences, can health care providers do better at serving the needs of West Virginia's citizens?

To answer this question, a series of meetings was held throughout 1997 involving hospital and physician leaders. Participants were intrigued by the possibility of a coalition of health care organizations forming to study variation issues. In December 1997, at a meeting hosted by the West Virginia Medical Institute, the West Virginia Coalition for Quality Health Care was created. Robert D'Alessandri, M.D., vice president for health sciences and dean of the West Virginia University School of Medicine, and Steven J. Summer, president and CEO of the West Virginia Hospital Association, were named co-chairmen of the coalition which is made up of these organizations:

- West Virginia Hospital Association
- West Virginia State Medical Association
- West Virginia Health Care Authority
- West Virginia University School of Medicine
- Marshall University Joan C. Edwards School of Medicine
- West Virginia School of Osteopathic Medicine
- University System of West Virginia
- West Virginia Bureau for Public Health
- WV Chapter/American Academy of Family Medicine
- WV Chapter/American College of Physicians

After a review of existing projects utilizing Dartmouth Atlas data, The Maine Medical Assessment Foundation was selected as the model for West Virginia's project, and its executive director, Robert Keller, M.D., was brought in to assist the group. Coalition members selected two clinical conditions for study: prostatectomy and surgical options in the treatment of early stage breast cancer. Both of these procedures carry wide practice variations within the state, lending themselves to opportunities for improvement.

The process continued with the creation of statewide physician study groups charged with the responsibility to understand the implications of practice pattern variation, to document current clinical practice and to develop consensus around questions of clinical judgment for the study condition. In carrying out their research, study groups are presented with information from a variety of sources that enables them to explore ways in which the utilization patterns might be explained or improved.

The Coalition's goal is to duplicate this type of structure in the state by creating four to six disease specific study groups over a three to five year period. This structure began with breast cancer and benign prostate disease studies. As the studies continue, physicians will become familiar and comfortable with small area analysis and Dr. Wennberg's process to analyze patterns of variation and develop consensus on treatment approaches. The evaluation and assessment phase, probably the most beneficial to the project, will look at the change strategies, along with the education provided, and determine whether the change can be sustained over time.

The Coalition provides information and opportunity, relying upon the innate desire of clinical professionals to practice at the highest possible level. It is the Coalition's responsibility to develop and provide strategies that will support the dissemination of the information obtained from the study group's deliberations.

## Urology Study Group

The Urology Study Group was formed in cooperation with the West Virginia Urological Society and held its first meeting in August 1999. Douglas McKinney, M.D., WVSMA vice president, was appointed as chairman and the other members are as follows:

James Lane, M.D. - Charleston
David Lindert, M.D. - Wheeling
Rocco Morabito, M.D. - Huntington
Carlos Naranjo, M.D. - Clarksburg
Harry Shannon, M.D. - Parkersburg

The members chose to begin their study of clinical practice variations by examining the variation surrounding TURPs in the treatment of BPH.

## Breast Surgery Study Group

The Breast Surgery Study Group held its first meeting in March 2000 and Robert Cochran, M.D., and Steven Jubelirer, M.D., were appointed co-chairs. The other members serving on this study group are as follows:

James Blom, M.D. - Wheeling
Emilia Dauway, M.D. - Morgantown
David Denning, M.D. - Huntington
Carl Fisher III, M.D. - Clarksburg
David Ghaphery, M.D. - Wheeling
Micheline Hyacinth, M.D. - Princeton
Roger King, M.D. - Morgantown
Jane Kurucz, M.D. - Huntington
Roberto Kusminsky, M.D. - Charleston
Catalino Mendoza Jr., M.D. - Clarksburg
Bryan Richmond, M.D. - Beckley

The members have elected to begin by examining practice variations related to breast-conserving surgery versus mastectomy.

## Activities of the Coalition

How do interpersonal relationships influence care?

Historically, researchers and planners have not examined the set of interpersonal network relationships within a community to determine how these ties impede or accelerate innovation. By using the structure put forth, it is projected a few individuals will adopt an innovation early, and over time, more people will adopt the innovation until the innovation becomes the norm.

Specific activities the Coalition has underway are:

- **Physician Study Groups** - Since the factors associated with variations in rates of surgery and hospitalization vary with illness and medical specialties, the project is working with individual medical specialties separately. Opinion leaders are being identified in each of the specialty areas, and an effort is being made to involve these leaders in the study groups and in the evaluations of the appropriateness of treatments. The opinion leaders will be the lead agents of change. They will function as champions for a new approach to practice.

- **Physician Specialty Societies** - The Coalition will approach the physician specialty group that represents represents the particular study area, present information from *The Dartmouth Atlas* and ask that the organization take a leadership role in organizing the study group.

- **West Virginia State Medical Association** - The West Virginia State Medical Association is a key partner in this initiative and has the primary responsibility for establishing ongoing communication with physicians throughout the state.

- **Medical Schools** - A critical factor in the ultimate success of the project is the ability to create a sustainable framework that engages health care providers in addressing issues of appropriateness in the provision of health care in West Virginia. This strategy will be most successful when methodology such as Small Area Variation Analysis and evidenced-based medicine are integrated into the medical school curriculum.

- **Medical Staff Meetings** - The Coalition intends to meet with individual and regional hospital medical staffs throughout the state. These sessions will bring physicians together within clinical specialty groups across several hospitals.

- **Quarterly Newsletter and Briefing Papers** - The Coalition will establish a newsletter to maintain contact with its many constituency groups. It will disseminate information about the various study groups and showcase those individuals and organizations that have made a commitment to support the Coalition. Periodic briefing papers will be prepared that focus on a particular clinical area under study. This information will also be included on the Coalition's web page.

The West Virgnia Coalition for Quality Health Care is funded by grants from the West Virginia Health Care Authority, the Claude Worthington Benedum Foundation, and the Robert Wood Johnson Foundation. The coalition's major aim is to create a sustainable framework and process for addressing issues of appropriateness in the provision of health care in West Virginia. The health care leaders and providers who serve on the coalition will collaborate to attempt to improve standards and address the perplexing question, *"What care is right?"* They will facilitate the development of physician-led, evidence-based approaches to patients, which will honor their preferences and improve their outcomes. The enduring framework for this project will be the capacity to analyze data and engage physicians to work together to identify and improve care for the citizens of West Virginians.

As the project director for the West Virginia Coalition for Quality Health Care, I would encourage anyone who would like to join a study group or obtain more information, to please contact at the West Virginia Hospital Association (304) 344-9744, or by e-mail at druppert@wvha.com.

Special Report

# Recent advances in end-of-life care

***ALVIN H. MOSS, M.D.***
*Professor of Medicine and Director, Center for Health Ethics and Law, West Virginia University, Morgantown*

**Editor's Note:** ***This article is the third of a series on the subject of end-of-life care in West Virginia. If you would like more information about this subject, please contact the West Virginia Initiative to Improve End-of-Life Care at www.wvinitiative.org or toll free at 1-877-209-8086.***

West Virginians are not satisfied with end-of-life care in this state. In a recent poll of 1,002 people conducted by Ryan, McGinn, Samples Research of Charleston for the West Virginia Initiative to Improve End-of-Life Care, less than 10 percent rated end-of life care in the state as excellent. Sixty percent were concerned about dying in pain. Over three-quarters said they would like to die at home, yet West Virginia ranks in the top 10 states for those with the highest proportion of people dying in the hospital (1).

In the May/June 2000 issue of the *Journal,* I was one of the co-authors of an article entitled *"Concerns and Self-Reported Competencies in End-of-Life Care: A Survey of Physicians in West Virginia,"* which reported that West Virginia physicians are not satisfied with the knowledge and skills in palliative care (2). Most physicians in practice today did not receive formal training in palliative care as part of their medical education. This article provides a brief overview of palliative care and highlights some of the recent advances in palliative medicine that will allow physicians in West Virginia to provide high quality end-of-life care to their dying patients and their families.

Palliative care is the comprehensive, interdisciplinary care of patients and families facing a chronic or terminal illness focusing primarily on comfort and support (3). The key elements of palliative care are meticulous pain and symptom control; psychosocial and spiritual support; a personalized management plan that optimizes patient-centered quality of life; family inclusion in the plan of care that extends through the time of bereavement; and delivery of continuous and coordinated services as the site of care for the patient changes.

According to a recent article by the director of the palliative care service at Massachusetts General Hospital, there have been five major advances in palliative care during the last decade (1). It is important for physicians to know these advances so they can incorporate them into their practices and improve the care of the dying.

## Pain management advances

During the last decade, research has demonstrated that over 85% of the pain experienced by terminally ill individuals can be adequately relieved with oral medications. For patients with chronic pain, sustained-release medications should be used and prescribed "around the clock" with the goal of as little pain as possible for the patient. In addition to the "around the clock" medication, immediate-release medication should be prescribed for "breakthrough" pain that occurs despite the use of the sustained-release medication.

Depending upon the nature of the pain, adjuvant medications may be quite helpful. For example, patients with cancer and metastases to the bone with severe bone pain often benefit from non-steroidal anti-inflammatory drugs and/or steroids to relieve the pain. If patients are experiencing burning, tingling or shooting from neuropathic pain from ischemia or injury to central or peripheral nerves, anticonvulsants and tricyclic antidepressants are the drugs of choice. Among the anticonvulsants gabapentin and valproic acid have been found to be particularly helpful.

Severe nociceptive pain, that which is sharp, aching or throbbing and which is classified as either somatic or visceral, responds best to opioids. The West Virginia Management of Intractable Pain Act passed in 1998 by the Legislature provides immunity to West Virginia physicians who prescribe opioids at whatever dose is necessary to relieve a dying patient's pain.

**Table 1. Recent Advances in Palliative Medicine.**

- **Better management of chronic cancer pain through thoughtful use of opioids and adjuvant medications.**
- **Improved management of other symptoms.**
- **Increasing use of advance care planning to respect patients' wishes for end-of-life care.**
- **Improved understanding of the limited use of medically administered nutrition and hydration for dying people.**
- **Achievement of consensus on the acceptability of withholding or withdrawing life-sustaining treatment and the use of double effect to relieve suffering at the end of life.**

## Improved management of other symptoms

The use of prokinetic drugs such as metoclopramide and new serotonin antagonist antiemetics such as ondansetron and granisetron have improved the management of cancer-related gastroparesis, nausea and vomiting. Haloperidol because of its dopamine-blocking effect is useful for opioid-induced nausea and vomiting.

The medications of choice for dyspnea are opioids in low dose and oxygen. Benzodiazepines such as a lorazepam are helpful for managing the anxiety frequently accompanying breathlessness.

Confusional states including delirium are common in terminally-ill people. Haloperiodol and chlorpromazine, often in low doses, are the drugs of choice for managing delirium. For depression associated with terminal illness, drugs with a rapid onset of action and a psychostimulant effect such as methylphenidate have been found to be very helpful. A response may be seen in three to four days as the dose is slowly increased for the desired effect.

## Increasing use of advance care planning

Most patients, once informed of their terminal condition and the lack of effect of cardiopulmonary resuscitation, request not to undergo CPR. More than 70% of the deaths in hospitals in this country are preceded by the issuance of a Do-Not-Resuscitate order, and the prevalence of DNR orders in nursing homes is even higher.

The completion of Medical Power of Attorney and Living Will forms allows West Virginians to name the person they want to make their medical decisions for them when they become too sick to make them for themselves and to indicate the types of treatments they do and do not want at the end of life. The recent Ryan, McGinn, Samples Research study found that 34% of West Virginian adults now have advance directives. Their use is becoming increasingly common as patients and families become more informed about their end-of-life care options.

## Limiting use of nutrition and hydration

Medical literature suggests a limited benefit for percutaneous gastric feeding tubes for patients in the last year of life. Among patients 65 years of age or older who had gastrostomies placed during a hospitalization, 63% were dead within a year (4). Feeding tubes have also been shown not to prevent aspiration (5).

Patients who stop eating and drinking at the end of life most often complain only of a dry mouth which can easily be treated with simple mouth care (6). The literature has also failed to find a benefit for the use of feeding tubes in patients with advanced dementia (7,8).

## Withholding and withdrawing treatment

The right of patients to request that life-sustaining treatment be withheld or withdrawn has been firmly established. This right was upheld in the 1990 U.S. Supreme Court case of Nancy Cruzan and was further supported by the enactment of the federal Patient Self-Determination Act in 1991. In West Virginia, the Health Care Decisions Act passed by the Legislature in March 2000 makes it easier for patients to have their wishes regarding life-sustaining treatment known and respected (9).

The issue of physician-assisted suicide has often been in the headlines. Research has shown that 60% of dying people who request physician-assisted suicide have treatable and potentially reversible depression. Another significant percentage have inadequately treated pain. Studies after the first two years of Oregon's physician-assisted suicide law indicate that less than one in 1,000 people are dying as the result of physician-assisted suicide (10). Since the reasons for requests for physician-assisted suicide have become better studied and palliative care has improved, the number of patients requesting physician aid in dying should continue to decrease.

It has become ethically and legally accepted to provide a medical treatment for the purpose of relieving pain and suffering even though a foreseeable, unintended consequence of the treatment is to hasten death. Such a practice is justified by the rule of double effect. Patients need not fear dying in pain provided that their physicians use this rule and prescribe as much medication as is necessary to relieve their pain and other symptoms. If pain and other symptoms are still not controlled, sedation for intractable suffering in the dying patient remains a further option. Some patients may voluntarily stop eating and drinking to hasten their death without requiring a physician's assistance (11).

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# Medical Assurance News

## Take precautions expanding office procedures

**Q. I am considering expanding the surgical procedures that I offer in my office to include some that require intravenous sedation. Are there any guidelines that I can follow to reduce the liability risks involved with in-office procedures?**

A: As technology progresses, the capabilities and resources available to physicians expand. Many physicians are now performing surgical procedures in their office. Performing medical or surgical procedures and administering anesthesia, especially intravenous sedation, is a double-edged sword; you are making surgery more convenient for the patient and maintaining automony while increasing your risk of being sued.

Risk management experts recommend physicians who perform office-based procedures develop a policy concerning the administration and monitoring of patients receiving intravenous sedation. The policy should address:

- The definition of conscious sedation.
- Guidelines to ensure the continuous monitoring of patients receiving conscious sedation.
- The immediate availability of oxygen.
- The immediate availability of resuscitative equipment.
- All skilled personnel – including someone who has, at a minimum, an ACLS certification and has shown evidence of competency in monitoring patients receiving conscious sedation – assigned to monitor the patient one-on-one.

Medical Assurance's Risk Resource[sm] advises physicians who perform office-based procedures and administer anesthesia keep an accurate and timely account of the procedure in the patient's record including:

- Monitoring and documenting the EKG.
- Monitoring and documenting the pulse oximetry.
- Documenting vital signs prior to administration of medication.
- Documenting vital signs every five minutes during administration of medication.
- Documenting medication, time and amount administered.
- Documenting vital signs and condition post procedure.
- Documenting required criteria for patient discharge.
- Documenting discharge with a responsible adult.

Physicians insured by Medical Assurance, the WVSMA's endorsed medical professional liability carrier, may contact the company's Risk Resource[sm] for prompt answers to liability questions by calling (800) 282-6242 or via e-mail at rmhelp@maih.com.

## *Some good news from the malpractice trenches*

Despite West Virginia's increasingly bleak medical litigation crisis, there is good news to report. According to the latest available claims statistics, five Medical Assurance insured physicians received defense verdicts in late September and October. Unfortunately, West Virginia physicians can't rest easy because since August, four Medical Assurance insureds were hit with verdicts totaling almost $11.5 million in cases which appeared to be frivolous in nature.

Medical Assurance remains committed to the defense of West Virginia physicians, especially in light of the current malpractice litigation environment. You should know that Medical Assurance, the WVSMA's endorsed carrier, is the only malpractice insurer to back up its defense philosophy with an extra million dollars of covarege at no cost for cases that go to trial and conclude with a jury verdict.

If you would like more information about this important coverage, please contact Steve Brown at (800) 331-6298 or 346-8228 in Charleston.

# Physicians, Physician Spouses, Office Managers: The 2001 Legislative Session is critical to the future of medicine in WV!

The WVSMA is planning a number of different events to augment our efforts at the State Capitol this legislative session. In order to have a successful impact, it is imperative that we have involvement from physicians, their office staff, and spouses from all specialties and all regions of the state. Please mark you calendar to attend the white coat day functions and at least one of the lobby days. Wear your white coat and your office practice name tags. We want the legislators to know there are many medical providers in the State Capitol these days.

***We need your help in sharing the message of organized medicine with our State Legislators!***

## Important Dates To Remember!

### *White Coat Day at the Legislature*

***Monday, February 19, 2001***

**1:00 p.m. – 3 p.m.** **Medical Assurance 2001 Loss Prevention Seminar - Embassy Suites Hotel, Charleston**
*Physicians have one last chance to earn a 5% premium discount by attending this presentation. Contact Gina Preston at (800)282-6242 or gpreston@maih.com to register.*

**3:30 p.m. – 5:30 p.m.** **Pre-White Coat Day Physician Advocacy Training - Embassy Suites Hotel**
*Learn the basics on how to effectively advocate for your profession at the Legislature. Receive good talking points on current efforts to battle the malpractice crisis, provider tax and prompt pay issues.*

**6:30 p.m. – 8 p.m.** **Annual WVSMA Legislative Reception - Embassy Suites Hotel**
*This is a perfect opportunity to mingle with your Legislators and discuss policy issues in a relaxed atmosphere. All Legislators, their staff and key members of the administration will be invited.*

***Tuesday, February 20, 2001***

**8:00 a.m. – 10 a.m.** **Policy issue briefing and briefings from key legislators - Embassy Suites Hotel**
*Gear-up to head to the Capitol. Get a briefing from key legislators on healthcare policy issues currently being discussed at the Legislature.*

**10 a.m.** **Depart for the State Capitol**
*Meet with legislators and share your viewpoints. Observe sessions of the House and Senate and committee meetings.*

**2:30 p.m.** **Day concludes**

### *Physician Lobby Days*

**Wednesday, March 14, 2001**
**Wednesday, March 21, 2001**
**Wednesday, March 28, 2001**
**Wednesday, April 4, 2001**

*It is vital that we continue sharing the message of organized medicine throughout the legislative session. The WVSMA has scheduled four physician lobby days and is asking that each county society choose one day to come back to the Capitol.*

*(Same schedule for each of the four days)*

**8:30 a.m. – 10 a.m.** **Policy issue briefing from WVSMA lobbyists - Marriott Hotel, Charleston**
**10 a.m.** **Depart to the State Capitol**
**2:30 a.m.** **Day concludes**

More information on these events will be mailed to you soon, *or* your may contact the WVSMA office at 304-925-0342.

# Intradural convexity chondroma: A case report and review of diagnostic features

***HOUMAN KHOSROVI, M.D.***

***ALI SADROLHEFAZI, M.D.***

***HIKMAT EL-KADI, M.D.***

***STEPHEN M. BLOOMFIELD, M.D.***

*Department of Neurosurgery, West Virginia University School of Medicine, Morgantown*

***SYDNEY S. SCHOCHET, M.D.***
*Dept. of Neuropathology, West Virginia University School of Medicine, Morgantown*

## Abstract

***Intradural convexity chrondromas are slow-growing tumors of young adults and children. Their symptoms are due to their size and degree of mass effect. They are extra-axial, avasular masses without peritumoral edema. CT and magnetic resonance resonance imaging of the head and cerebral angiography are helpful in diagnosis. Treatment is surgical resection.***

## Introduction

Chrondromas are benign cartilaginous tumors which can grow anywhere in the body. The first intracranial chondroma was described after a biopsy by Hirshfield in 1851. First operative resection of an intracranial chondroma was published by Nixon in 1982 (1).

In this article, we present a case of an intradural convexity chondroma and describe its clinical, radiological and pathological features.

## Case report

A 14-year-old, left-handed male presented with an 18-month of progressive weakness in his left arm. He had a four-month history of focal motor seizures involving the right side with Todd's paralysis lasting up to 10 minutes which were increasing in frequency and duration.

This patient reported frequent morning headaches associated with nausea and vomiting. He also developed difficulty with memory and attention span which led to a decline in his scholastic performance. On examination, he had a right spastic hemiparesis especially in the leg with no other neurological deficits.

Skull radiographs revealed a thick circumferential band of stippled calcifications overlying the left frontoparietal region (Figure 1). Head CT showed a large, lobulated heterogeneous mass within the left cerebral hemisphere. The periphery of the mass consisted of a thick enhancing rind of tissue containing areas of clumped calcification. The center of the lesion was hypodense suggesting cyst formation and/or necrosis (Figure 2).

The lesion exerted mass affect upon one ventricular system with resultant midline shift. The falx cerebri was also deviated from left to right. A cranial MRI showed an extraaxial mass which was

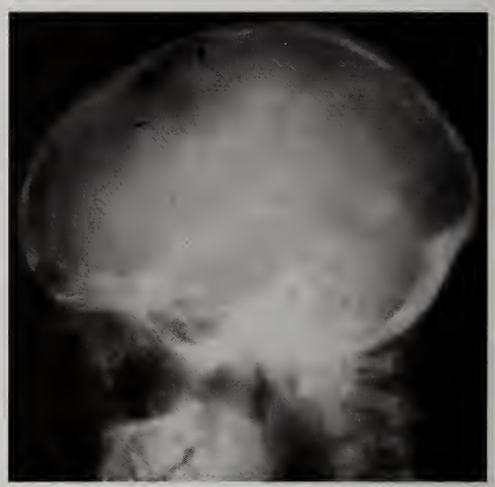

**Figure 1. Lateral skull radiograph shows a faint round rim of calcific densities overlying the fronto-parietal region (arrows).**

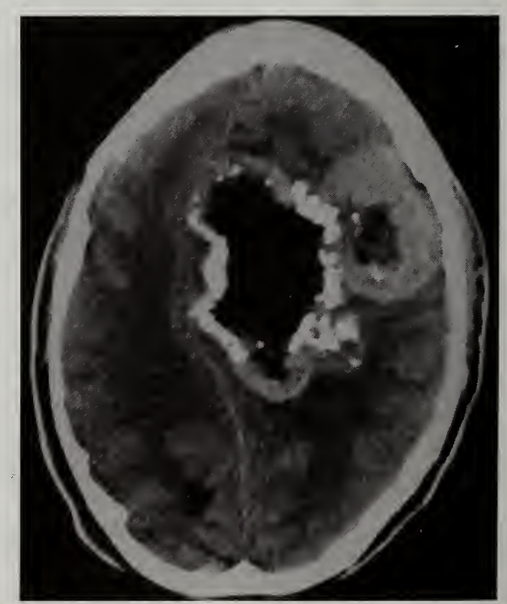

**Figure 2. Contrast enhanced axial CT scan showing a complex lobulated solid-cystic mass with a thick enhancing and calcified rim.**

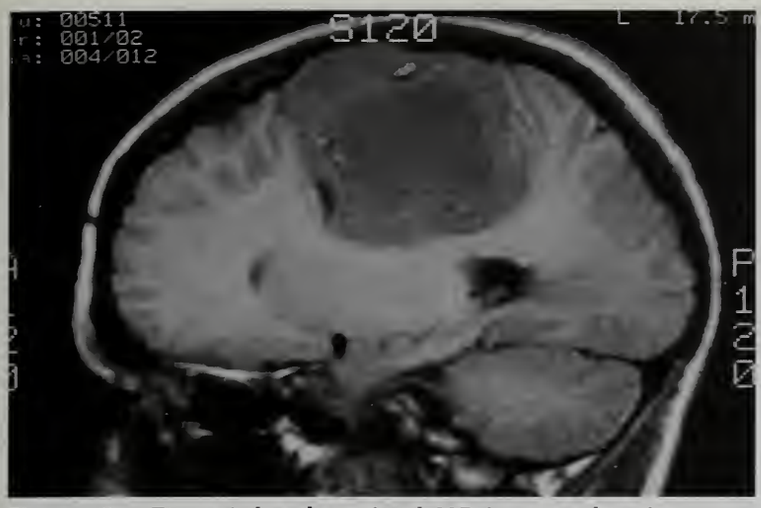


**Figure 3a. T1 weighted sagittal MR image showing buckling of the cerebral gyri due to extraaxial mass effect. The lesion is hypointense; more so at its center.**

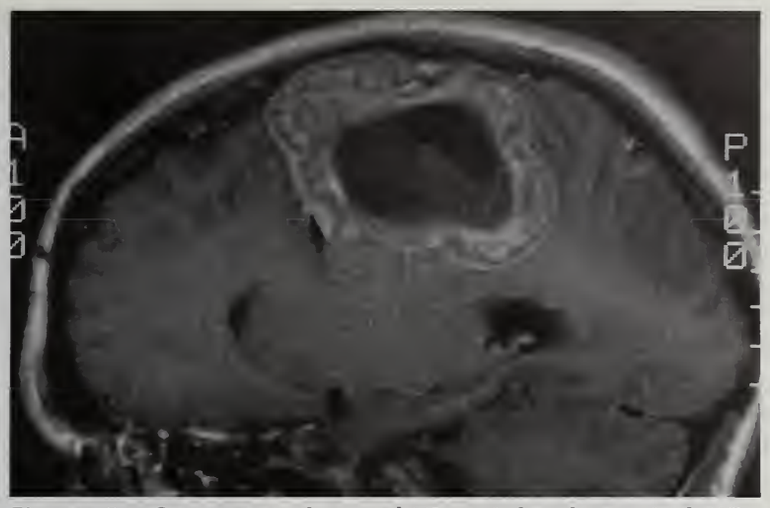

**Figure 3c. Contrast enhanced T1 weighted saggital MR image indicating hetergenous enhancement of the wall of the lesion.**

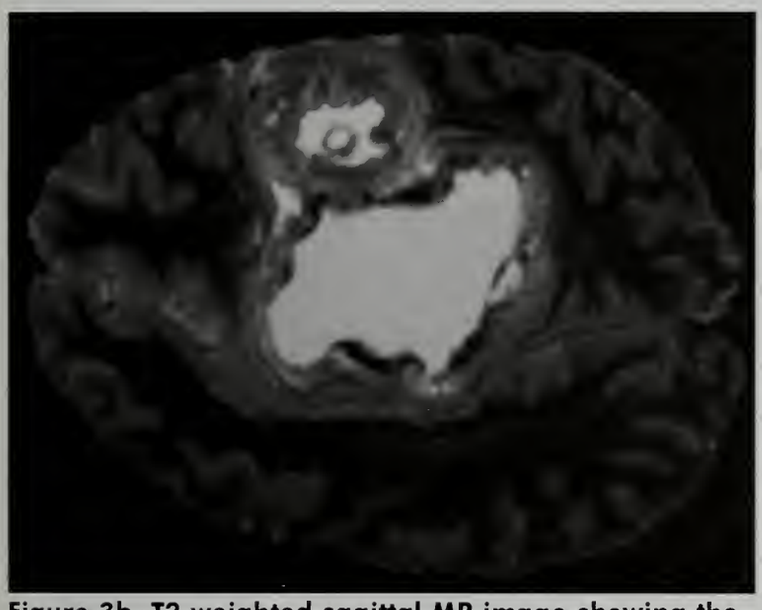

**Figure 3b. T2 weighted sagittal MR image showing the periphery of the mass is isointense to gray matter. The scattered hypointense foci represent calcific deposits identified on the plain radiograph and CT study.**

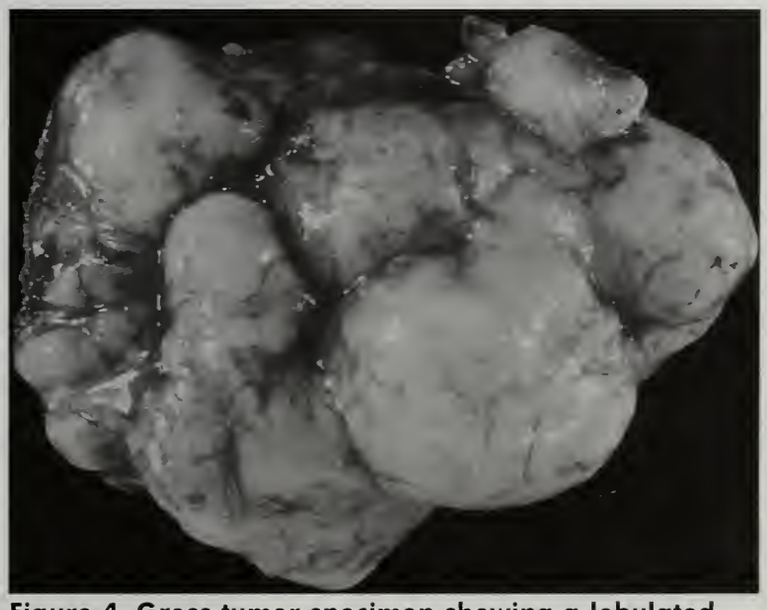

**Figure 4. Gross tumor specimen showing a lobulated, firm, white mass.**

predominently hypointense on T1 weighted images (Figure 3a). The periphery of the mass was isointense to gray matter on T2 weighted images (Figure 3b). The calcific aggregates were hypointense on both sequences.

The center of the lesion was hypointense on T1 and hyperintense on T2. Vasogenic edema was distinctly absent. Moderate heterogeneous enhancement of the periphery of the lesion was observed following intravenous contrast administration (Figure 3c). Cerebral angiography showed an avascular mass affect with downward displacement of the pericallosal artery and sylvian triangle.

Since the patient was left handed, a Wada test was performed which demonstrated left hemispheric dominance. His memory function appeared to be relatively intact following sodium amytal injections into either internal carotid artery, suggesting that each cerebral hemisphere had the capacity to support memory functioning. He was started on diphenylhydantoin, which was not effective in reducing the frequency or duration of his focal seizures.

Surgery was carried out by a left frontoparietal craniotomy. The tumor was intradural and seemed to arise from a broad area of dura over the convexity. It was a lobulated, firm, white mass (Figure 4) with a central cyst comprising 50% of its volume. The cyst fluid was tan colored. Intraoperative cortical mapping did not reveal the motor strip, suggesting it had been displaced medially beneath the tumor. An advanced model CUSA did not prove helpful due to the firmness and extensive calcification of this tumor.

Debulking was performed in a piecemeal fashion by sharp dissection. The tumor separated easily from the underlying brain and no gross invasion of the brain parenchyma was observed.

Histologic evaluation revealed the tumor was composed of moderately cellular chrondroid tissue. The cells were arranged in sheets and sometimes formed nodules (Figure 5). The majority of the lacunae contained a single chondrocyte (Figure 6). The chondrocytes had relatively uniform nuclei and showed no mitotic activity. The majority of the matrix took up mucicarmine and alcian blue. Foci of ossification were also present within the lesion (Figure 6). The tumor tissue abutted dense connective tissue that was morphologically consistent with dura.

Postoperatively, this patient immediately developed uncontrollable focal seizures in his right upper extremity, followed by a dense but transient hemiplegia that lasted two weeks. He had complete resolution of his spastic right hemiparesis and his scholastic performance improved. Follow-up MRI of the brain showed no evidence of recurrence.

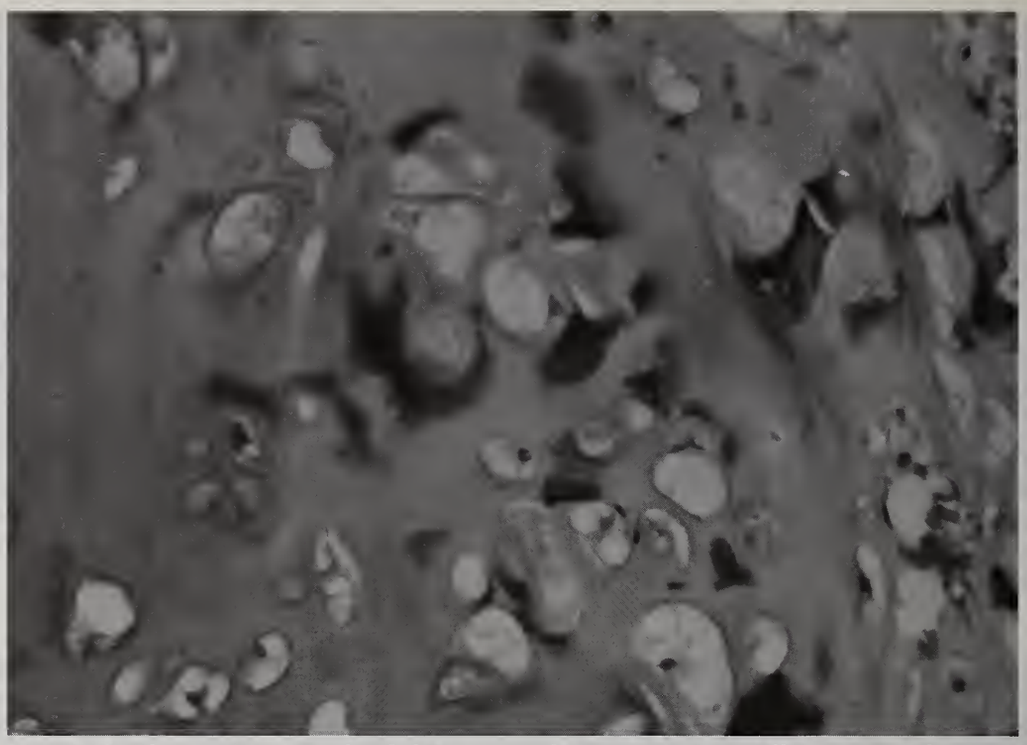

**Figure 5. Photomicrograph of the tumor demonstrating cells arranged in sheets and occasional nodules.**

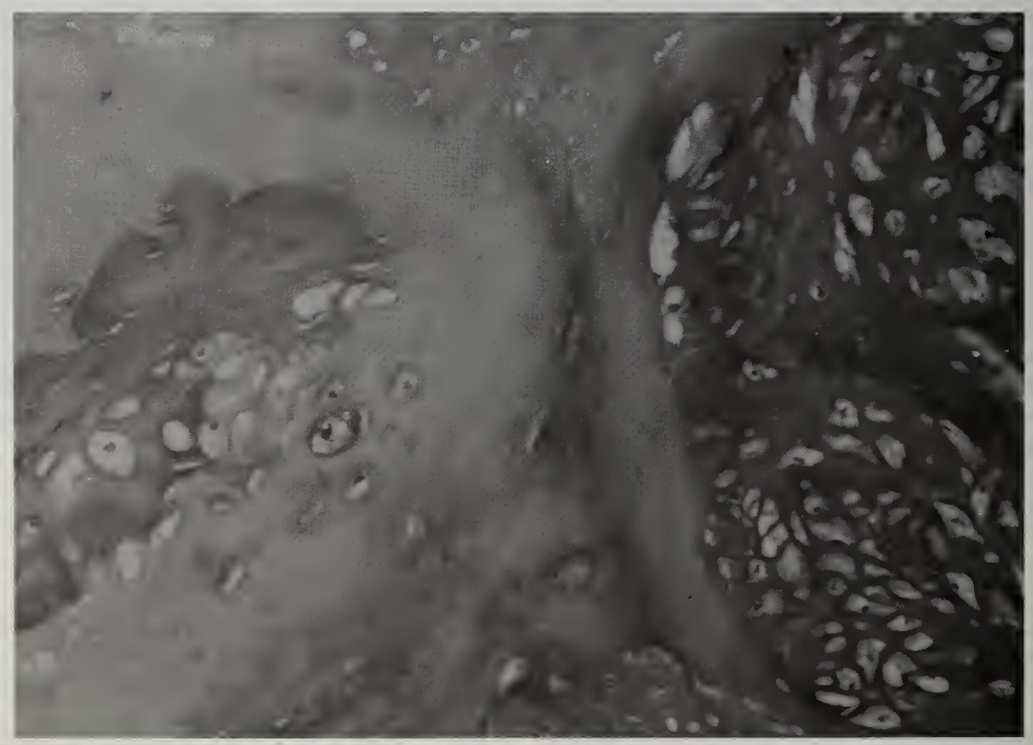

**Figure 6. Photomicrograph of the tumor demonstrating lacunae containing a single chrondrocyte.**

## Discussion

Cartilaginous tumors occur both intra- and extra-cranially. Intracranial cartilaginous tumors are classified histologically as chondromas, osteochondromas, and chondrosarcomas.

Intracranial chondromas can be solitary, multiple, or associated with conditions known to have cartilaginous tumors elsewhere in the skeletal system. Two such conditions are Maffucci's syndrome (1) and Ollier's disease. In these two disorders, the intracranial tumors occur simultaneously with multiple extracranial chondroid tumors of the skeletal system.

Most intracranial chondromas arise at the skull base especially from the ethmoid or sphenoid bones at the sphenopetrosal, spheno-occipital, and petro-occipital synchondroses (2, 3). Chondromas in this location are typically extradural. About 15% (3) of the intracranial chondromas occur over the convexity. Tumors in this location are typically intradural and have a dural attachment. Chondromas may rarely be found in other intracranial locations including the choroid plexus, and the brain parenchyma.

As in the skeletal system, intracranial chondromas present from the second to sixth decade of life with a peak incidence at the age of 30. The youngest patient reported was 15 months old. Due to their non-invasive nature and slow growth rate, patients with convexity chondromas may lack any symptomatology until the tumor is of significant size. When signs and symptoms are present they may be manifestations of increased intracranial pressure and/or are secondary to compression of adjacent structures. Examples of the latter include seizures, personality changes, language deficits, and

spastic hemiparesis. Hydrocephalus is uncommon. A chondroma may possibly be found accidentally on a CT scan as part of a work-up for another reason.

Chondromas are lobulated, appear pearly white, and have a firm consistency. The majority of the convexity tumors are adherent to the dura. Foci of calcification are found in 70%-90% of these tumors (4). Just like meningiomas and gliomas, chondromas can induce reactive changes in the overlying skull. The bony reaction is usually in the form of endostosis, thinning or scalloping. If there is evidence of bone invasion, one must suspect a low-grade chondrosarcoma. However, in the skull base, these chondromas have a tendency to erode and destroy bone (4,5).

Histologically, chondromas possess relatively few blood vessels. They consist of mature cartilaginous cells but are more cellular than resting cartilage. Cytologically, the chondrocytes have plump and vacuolated cytoplasm. The cells are usually not multinucleated and do not show features of atypia. Mitotic figures are rare. There does not appear to be any particular pattern of cellular arrangement, and the overall appearance lacks uniformity. The matrix is composed of hyaline cartilage which stains with alcian blue, PAS, and mucicarmine. The tumor matrix may show different stages of regressive changes leading to cyst formation.

The theories about the origin and etiology of chondromas are similar because it is generally accepted that these tumors are of mesenchymal origin, but the exact structure from which they arise is not known. Etiologic theories include metaplasia (2, 3, 5), and trauma (6). Some authors suggest that chondromas arise from transformation of a fibroblastic meningioma to a chondroblastic meningioma (6), yet others have suggested a genetic origin of these tumors because they felt that the theories do not explain the multiple cartilaginous tumors found in patients with Maffucci's syndrome or Ollier's disease.

On skull radiographs, convexity chondromas usually show evidence of calcification. Similar to their skeletal counterparts, they may have one of three patterns:

1) stippled;
2) flocculent; and
3) ring and arc calcifications.

There may be evidence of bony changes secondary to local tumor growth. These changes include thickening (6), thinning, or erosion and destruction of the skull base bones including their foramina (3).

CT scans reveal the size, location, and cystic cavitations. The convexity tumors cause a significant amount of brain distortion and are without periotumoral edema. CT scans also reveals a mass that can be hyperdense or hypodense (2) with respect to the surrounding brain. With routine contrast injection, the difference between the HU values of noncontrasted and contrasted studies is 6-10 HU (4). With the administration of contrast, chondromas demonstrate a nonspecific heterogeneous enhancement (4). However, during a delayed high-dose contrast study (7) the tumor does show a marked homogeneous enhancement with an almost four-fold increase in the Hounsfield units.

There have been MRI descriptions of seven other cases of intracranial chondromas (8). Our study correlates with the other reports regarding the findings on T1 and T2 weighted images. These lesions are hypointense on T1-weighted images, and they are iso- to hyperintense on T2-weighted images (8). These tumors show mild to moderate heterogeneous enhancement following the administration of contrast. They may also show ring or marginal linear enhancement which represents the dura (8). MRI is capable of showing the separation between the tumor and gray matter, as was illustrated in our case, confirming the extra-axial location of this neoplasm. It also shows the lack of peritumoral edema.

Cerebral angiography reveals an avascular mass. There is no tumor blush, and other than displacement the extracranial and intracranial blood vessels are not abnormal (3,4,5,8).

The treatment of intracranial chondromas is surgical. Skull base lesions are not as easily accessable as their convexity counterparts, and have higher morbidity with surgery. Tumors located in the skull base are more often partially resected in contrast to those located over the convexity. Even though chondromas are slow growing tumors, partially resected tumors tend to reoccur since patients are typically young at the time of presentation. On the other hand, complete resection is curative as is the case for convexity tumors. Chondromas do not respond to radiation (9,10), and it is not recommended since there is a theoretical risk of malignant transformation or de novo tumor formation.

The differential diagnosis for the most likely tumors of the convexity in children and young adults include meningioma, osteochondroma, chondrosarcoma, osteosarcoma, and hemagioblastoma. Meningiomas are the most common primary nonglial tumor, accounting for 15%-20% of all primary brain tumors. However, the incidence is less than 5% in children and young adults. When they do occur in the younger age group, they typically occur in more unusual locations such as the posterior fossa and lateral ventricles.

The symptomatology of convexity meningiomas is similar to any other tumor exerting a mass effect onto the adjacent cerebral hemispheres or those of increased intracranial pressure if very large. Histologically, there is no unique feature that distinguishes meningiomas occuring in children and young adults from those occuring in the older age group. However, when they do occur in children and young adults, they tend to be more aggressive. Treatment is also surgical when possible, but recent data regarding experimental chemotherapeutic agents and different radiation therapy modalities have made adjuvant therapy an option for residual tumor. They differ from convexity chondromas primarily by their radiographic apppearance. In contrast to chondromas, 90%-95% of convexity meningiomas show a strong homogeneous enhancement

with both CT and MRI studies. Peritumoral edema occurs in 60% of meningiomas. Angiography also reveals the more vascular nature of meningiomas as evidenced by the "sunburst" of enlarged dural feeders and prolonged "tumor blush."

The distinction between chondroma and osteochondroma is primarily a histological one. In the skeletal system, osteochondromas are defined as tumors consisting of two elements:

1) a cartilage-capped covering; and
2) a bony attachment to the underlying host bone.

With skull base osteochondromas, the above definition may hold, but over the convexity, the definition is not as clear. Here the difference is primarily a histological one. Chondromas and osteochondroma have a strong histological resemblance, however the main differentiating factor is foci of ossification. Another important fact is that over the convexity the incidence of chondromas is more frequent than osteochondroma. Clinical presentation, radiographic imaging, and treatment are similar to patients with chondromas.

Intracranial chondrosarcomas and osteosarcomas are rare in children and young adults. They occur more commonly at the skull base rather than over the convexity. These tumors are very aggressive, and typically cause significant bony destruction. Brain invasion and edema is a common finding. These characteristics are radiographically apparent and are the distinguishing features that separate them from their benign counterparts. Treatment is primarily surgical followed by adjuvant therapy.

Hemangioblastomas are rare tumors in children and young adults. Supratentorial hemangioblastomas consist of 1.5% of all intracranial hemangioblastomas. Pathologically, they can be solid or cystic with mural nodules. These tumors are extremely vascular and therefore strongly enhance on both CT and MRI studies in addition to having a prolonged vascular stain.

Stereotactic or free-hand biopsy should generally be avoided in a young (< 40 ) patient with an extraaxial convexity tumor. Due to the firmness of cartilaginous tumors, a biopsy needle may displace the whole tumor causing further compression and/or injury to the underlying brain. There is also the theoretical risk of needle breakage. Additionally, due to their dural attachment, any tumor displacement can lead to separation of the dura from the skull and potentially cause an epidural hematoma. Regardless of the tumor pathology, treatment of an extraaxial convexity tumor is gross total resection in the young adult. Tissue diagnosis can be made at the time of resection thus eliminating the risks of stereotactic or free-hand biopsy.

## Conclusion

Convexity chondromas are tumors of young adults. They are slow growing and therefore present only after they are large enough to cause dysfunction of the underlying cotex.

Clinically, convexity chondromas behave in a more benign fashion as compared to those located in the skull base. Neuroimaging studies reveal an extraaxial avascular tumor with variable amount of calcification and cyst formation. They do not induce peritumoral brain edema.

Surgery is treatment of choice. No effective adjuvant treatment is known. As a result, the diagnosis of convexity chondroma can be suggested preoperatively by the patient's history, suggesting a slow growing tumor. CT (consider delayed high-dose imaging), MRI (with and without gadolinium), and cerebral angiography.

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# Estrogen-induced relaxation in bovine coronary arteries in vitro: Evidence for a new mechanism

**JELICA D. J. KALENIC, M.D.**
*Dept. of Pediatrics, West Virginia University School of Medicine, Morgantown*

**ROLANDO J. RAMIREZ, Ph.D.**
*Magee-Womens Research Institute, Pittsburgh, Pa.*

**STANLEY EINZIG, M.D.**
*Depts. of Pediatrics and Physiology, West Virginia University School of Medicine, Morgantown*

**WILLIAM A. NEAL, M.D.**
*Depts. of Pediatrics, West Virginia University School of Medicine, Morgantown*

**HATIM A. OMAR, M.D.**
*Dept. of Pediatrics, University of Kentucky, Chandler Medical Center, Lexington*

## Abstract

***Numerous studies have shown estrogen to be vasoactive in various circulations. Our objective was to determine the effect of estrogen on isolated bovine coronary arteries and the possible mechanism. Bovine coronary arteries, precontracted with thromboxane mimetic $U_{46619}$ were given doses (0.01-30μM) of 17B-estradiol in the presence and absence of endothelium and these inhibitors: 10μM indomethacin (cyclooxygenase inhibitor), 10μM methylene blue (inhibits soluble guanylate cyclase), 100μM nitro-L-arginine (inhibits nitric oxide synthesis), 100μM isobutylmethylxanthine (phosphodiesterase inhibitor) and 30μM mifepristone ($Ru_{38486}$ steroid receptor antagonist). Our results indicated that, estrogen, in the highest concentration used (30μM), elicited an acute dose-dependent relaxation of bovine coronary arteries from 4%-68% (n=15). No major difference in relaxation was observed between coronary arteries with or without endothelium, indicating that the mechanism was endothelium-independent. Indomethacin, nitro-L-arginine and methylene blue did not alter this relaxation, suggesting that relaxant prostaglandins, l-arginine products and cGMP are not involved (n=11-16), isobutylmethylxanthine enhanced relaxation from 20%-40% (n=15 p < 0.01), suggests a role for cAMP. Furthermore, mifepristone reduced the relaxation by more than 50% (n=15 p<0.05) consistent with the role for estrogen receptors. Based on our study, estrogen causes a dose-dependent relaxation of bovine coronary arteries that does not appear to utilize endothelium, prostaglandins, cGMP or arginine products, but may involve cAMP and estrogen receptors. This study may help justify treating myocardial ischemia with estrogen.***

## Introduction

Although the cardioprotective effect of estrogen is well recognized (1), mechanisms by which this steroid hormone provides its effect are not fully understood. The cardiovascular protective action of estrogen is reportedly mediated by effects on lipoprotein metabolism, hemostatic factors and by the direct effect on the vessel wall.

One characteristic of estrogen that may be important in cardioprotection is its effect on vascular tone generation. Evidence of this would be estrogen improvement of coronary blood flow in both postmenopausal women (2) and monkeys with coronary atherosclerosis (3). The specific mechanism by which estrogen affects vascular tone still remains unclear.

Rabbit aorta data have shown that estrogen promotes and enhances endothelial-dependent relaxation and contraction (4,5). Additionally, an increase in endothelial nitric oxide (6) and prostacycline (7) release has been demonstrated in rabbit coronary arteries and rat aortas respectively. There is also the possibility that estrogen may influence vascular relaxation via decreasing endothelium-derived vasoconstrictor prostaglandins, thomboxanes (5), superoxide radicals and endothelines (8). Conversely, endothelium-independent relaxations are possible, as has been shown in the rabbit coronary artery (9). This relaxation and that in guinea pig cardiac myocytes (10) are thought to be due to calcium channel blocking properties of the hormone.

In this study, we investigated the vasoactivity of acute estrogen treatment in isolated bovine coronary arteries to add evidence in support of estrogen as an important cardiovascular agent. We also attempted to define the specific mechanisms responsible for this vasoactivity by employing the use of various pharmacological agents.

## Materials and methods

### Tone measurements

Bovine hearts were obtained from a local slaughterhouse right after slaughter. The left anterior descending coronary arteries were cut out and during transport they were kept in an ice-cold phosphate buffer (mM/liter) solution of: Glucose 11.09 mM/liter, NaCl 125, KCl 2.7, Tris 23.8 and CaCl2 2.0.

The vessels were cleaned carefully from surrounding tissue and cut, with a new scalpel, into rings of 2 to 3 mm in diameter and 2 mm in length. Care was taken to avoid damage to the endothelium. Some of the rings were denuded of endothelium by gentle rubbing of the lumen with the wooden handle of a cotton swab for about 30 sec. The arterial rings were then mounted on wire hooks attached to force displacement transducers (T 43-05, Colbourn Instruments) for measuring changes in isometric force using methods already described (11). Thereafter, vessels were incubated in 10 ml baths (Metro Scientific) with Krebs-buffer

(pH 7.4) solution containing (mM/liter): 118 NaCl, 4.7 KCl, 1.5 CaCL2, 25 NaHCO3, 1.1 MgSO4, 1.2 KH2PO4 and 5.6 glucose. The baths were individually thermostated (37°C), and gassed with 95% $O_2$/ balanced air. Rings were adjusted to 5g passive tension, which was found to be the optimal passive force for maximal contraction. Changes in force were recorded on a Colbourn computer-based recording system.

After a two-hour equilibration at the optimal passive tension, the vessels were depolarized with Krebs-bicarbonate solution containing KCl (123 M/liter) in place of NaCl. This treatment produces maximal contraction and enhances the reproducibility of subsequent contractions. Additionally, it allows the evaluation of the viability of vessel rings. The arteries were then re-equilibrated with Krebs-bicarbonate for 15 min. before conducting experiments. The removal of endothelium in some artery rings was confirmed by examining the effect of 0.01-1 (M acetylcholine on arteries precontracted with 0.1-3(μ/l 5-hydroxytryptamine (5HT). Endothelium-denuded arteries contracted at the largest dose of acetylcholine and relaxations were not observed.

### Exposure to estradiol

Vessels were first precontracted to a submaximal average tone of 1.5 (0.3g using the thromboxane mimetic $U_{46619}$ (10-100(M/liter). The dose of $U_{46619}$ was adjusted to produce similar tone in all rings. Tone was allowed to achieve a steady state level; then, cumulative doses of estradiol (0.01-30μM/liter) were added to the organ baths, allowing a 5 min. period between doses or maximum response. After the highest dose was added, the experiment was completed.

In order to elucidate specific mechanisms of relaxation, the same experiments were again performed in the presence of a variety of pharmacological inhibitors for 15 min. These agents were chosen to block specific mechanisms that might contribute to specific estrogen effect.The concentrations and names of the agents were as follows: 10mM/L indomethacin (Indo, cyclooxygenase inhibitor), 10mM/L methylene blue (MB inhibits soluble guanylate cyclase), 100mM/L nitro-L-arginine (NLA inhibits nitric oxide synthesis), 1 mmol/L isobutylmethylxanthine (IBMX, cAMP phosphodiesterase inhibitor) or 30mM/L mifepristone ($RU_{38486}$, steroid receptor antagonist).

Dilutions of 5HT were made in distilled deionized water and 10μl aliquots were added to the 10 ml baths. Indomethacin was dissolved in absolute ethanol and 10μl from this solution was added to the bath. 17β-estradiol was dissolved in ethyl alcohol to give a stock solution of $10^{-2}$ M. Vehicle control with 10μl ethyl alcohol was performed in five vessels without any significant effect. The stock solutions of $U_{44619}$ were made in ethyl alcohol and serial dilutions of stock were made in distilled deionized water. NLA, $RU_{38486}$, IBMX and MB were dissolved in distilled deionized water. NLA and IBMX were added in 100μl aliquots, whereas $RU_{38486}$ and MB were added in 30- and 10μl aliquots respectively.

### Materials

Indomethacin, methylene blue, nitro-L-arginine, 5HT (5-hydroxytryptamine), isobutylmethylxanthine and 17β-estradiol were purchased from Sigma Chemical Company (St. Louis). $RU_{486}$ was generously provided by Roussel-UCLAF (Romainville, France). $U^{44619}$ was obtained from Cayman Chemical, Ann Arbor, MI. Other chemicals were analyzed reagent grade from Baker Chemical Co. (Phillipsburg, NJ).

### Statistical analysis

All relaxations were calculated as percent of $U_{44619}$ induced tone. Nonpaired Student's t-test was utilized to compare responses between two groups. For multiple comparisons, analysis of variance (ANOVA) was performed followed by post-hoc Duncan's test.

The accepted level of significance was $p < 0.05$. The number of experimental determinations (n) in all cases is equal to the number of animals from which a vessel ring was used for treatment or control group.

## Results

The addition of 0.01-30μmol/liter 17β-estradiol to intact bovine coronary vessels precontracted with 0.3μmol/liter $U_{46619}$ causes rapid and sustained concentration-dependent relaxation up to 68% (n=15). The relaxation is expressed as a percentage of the $U_{46619}$ induced tone before addition of the first estrogen dose.

In addition, comparison of the magnitude of relaxation in response to 17β-estradiol at each concentration level between endothelium-intact and endothelium-denuded arteries did not show significant difference (Figure 1). Thus, in our study, 17β-estradiol relaxation is not dependent on mediators released from the endothelium.

Bovine coronary vessels pretreated with inhibitors [(a) 10μmol/liter indomethacin, (b) 100μmol/liter nitro -L-arginine or (c) 10μmol/liter methyl blue] when exposed to 0.01 -30μol/liter 17β-estradiol were relaxed in a similar manner to vessels in the control group without inhibitors pretreatment (n= 15). The lack of effects of these probes is shown in Figure 2 (a,b,c). These results suggest that relaxation of bovine coronary vessels to 17(-estradiol is not mediated by relaxant prostaglandins, l-arginine products, or cGMP.

Pretreatment of bovine coronary vessels with 100mM/liter IBMX significantly enhanced the 17b-estradiol-induced relaxation from 20% to 40% ($n=15$ $p < 0.01$) as shown in Figure 3. This is consistent with mediation by cAMP.

Pretreatment of bovine coronary arteries with 30μM/liter $RU_{38486}$ markedly reduced the relaxation to 17β-estradiol by more than 50% ($n=15$, $p < 0.05$) (Figure 4) suggesting a role for estrogen receptors in the mechanism of this relaxation.

## Discussion

Animal studies in vitro and in vivo, as well as clinical studies, have suggested a variety of vascular effects and mechanisms of action of estrogen. This study shows that

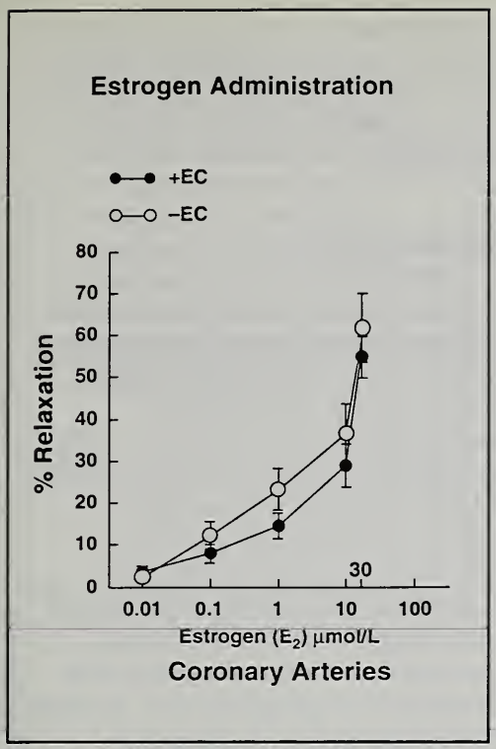



**Figure 1. Summary data showing relaxation response to 17β-estradiol in endothelium-intact (+EC) and endothelium denuded (EC-) bovine coronary arteries and the lack of effect of removal of endothelium on the relaxation. The vessels were precontracted with thromboxane mimetic $U_{46619}$. The relaxation is given as a percentage of the $U_{46619}$ induced tone and values represent the means ± S.E.M. in 15 determinations from 15 different animals.**

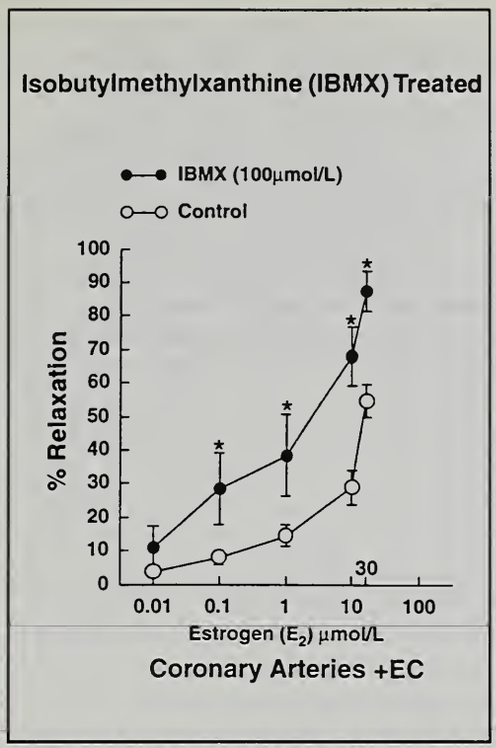



**Figure 3. Summary data showing the enhancement of the relaxation from 20%-40% of endothelium-intact coronary bovine arteries in response to 17β-estradiol after pretreatment with 100µmol/L isobutylmethylxanthine (IBMX) suggest a role for cAMP (n=15, p<0.01).**

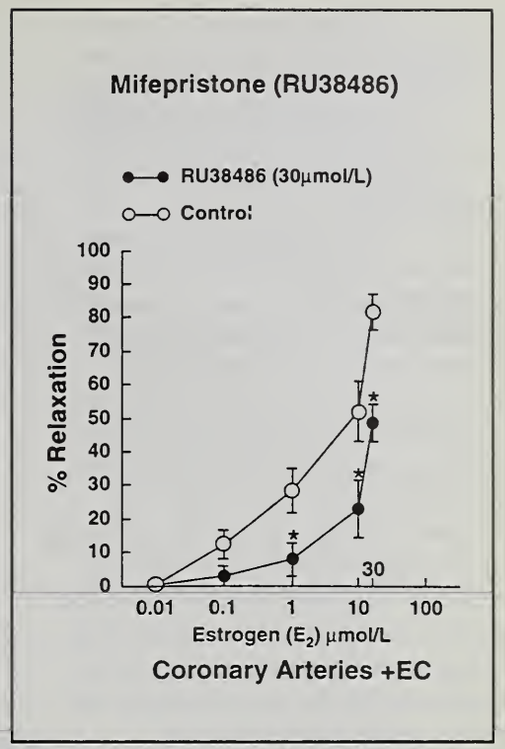
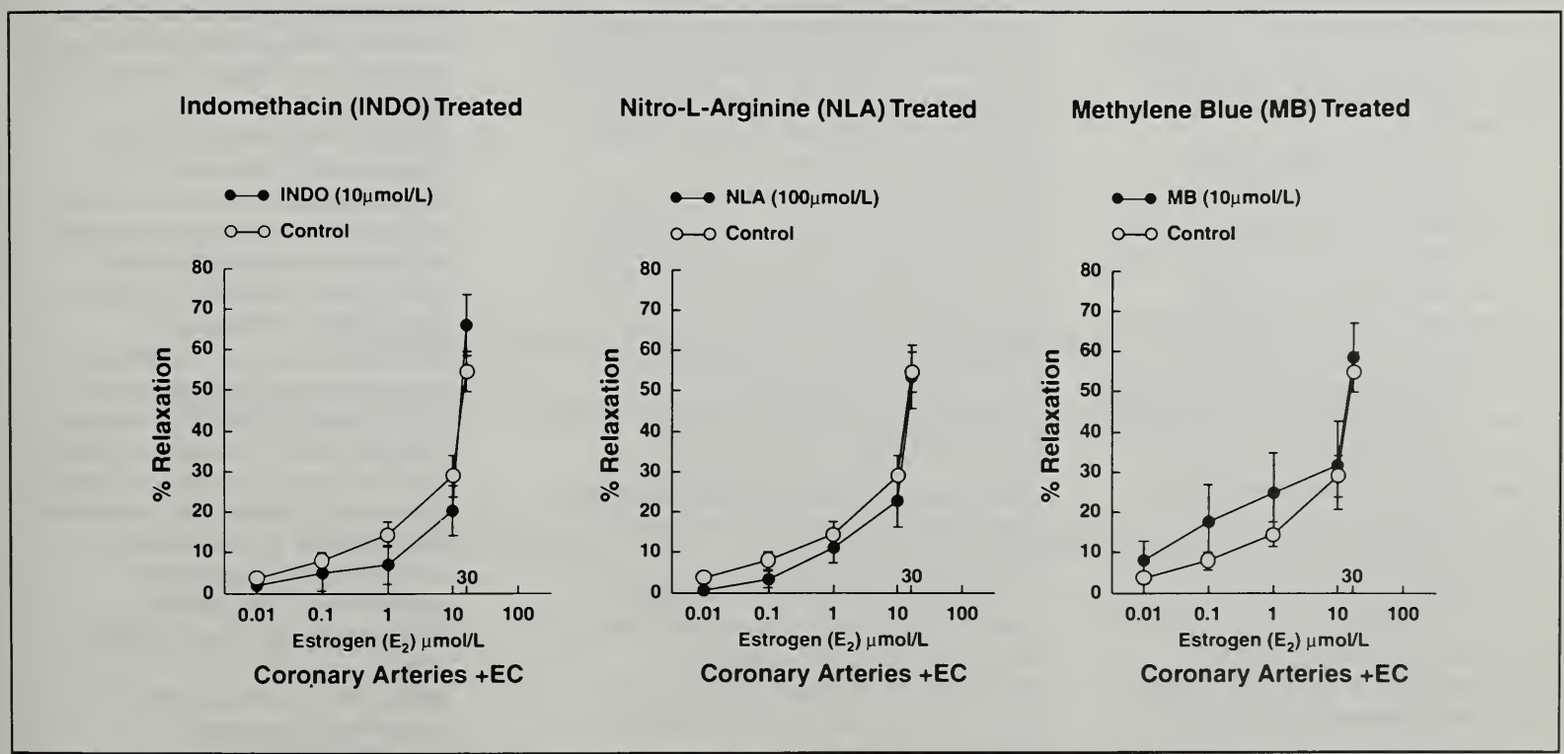



**Figure 4. Summary data showing the inhibitory effect of pretreatment with 30µmol/L mifepristone ($Ru_{38486}$) on relaxation produced by 17β-estradiol in endothelium-intact bovine coronary arteries. Relaxation was reduced by more than 50% suggesting that estrogen receptors could be included (n=15, p<0.05).**




**Figures 2a,b,c. Summary data showing the lack of effect of pretreatment with (a) 10µmol/L Indomethacin (Indo); (b) 100µmol/L Nitro-L-Arginine (NLA); and (c) 10µmol/L Methyl blue (MB) on the relaxation produced by estrogen in endothelium-intact bovine coronary arteries (n=11-16).**

17β-estradiol is a vasoactive hormone causing a rapid and sustained dose-dependent relaxation in precontracted bovine coronary arteries with and without endothelium.

Our results did not indicate a difference in relaxation between endothelium-intact and endothelium-denuded coronary bovine arteries. Furthermore, nitro-l-arginine and indomethacin, inhibitors of endothelium-derived relaxing factor and prostaglandin production, did not affect the relaxation induced by 17β-estradiol in endothelium-intact coronary arteries. The lack of effect of these probes in our study suggests that relaxation does not appear to be mediated by the endothelium via nitric oxide production or arachidonic acid metabolites.

Similar results have been reported in isolated rabbit coronary arteries (9) and on human atherosclerosis-free epicardial arteries in vitro (12). Another study showed that 17β-estradiol relaxation in rabbit coronary artery rings was endothelium and nitric oxide dependent under certain hormonal conditions such as acute estrogen withdrawal (13). A report suggesting the existence of both endothelium-dependent and endothelium-independent mechanisms (but at higher concentrations), in isolated rabbit aortic rings has also been published (14).

Potentiation of 17β-estradiol-induced relaxation by IBMX, as shown in our study, suggests a role for cAMP. IBMX, a phosphodiesterase inhibitor, may decrease cAMP metabolism, increase cAMP level and, through cAMP-dependent protein kinase-mediated events (15), enhance 17β-estradiol relaxation of bovine coronary arteries. Other authors have only suggested that cAMP might be involved in the cellular response to estrogen (16).

Methylene blue in our study did not affect relaxation to estradiol on the bovine coronary vessels, indicating no role for cGMP in this relaxation. However, in human coronary vessels, contents of both cAMP and cGMP were increased after exposure to estrogen (17). This could be explained by cross activation of cGMP-dependent protein kinase by cAMP. The elevation of cAMP within its physiological concentration range causes cGMP protein kinase-dependent activation in pig coronary smooth muscle cells. Thus, the smooth muscle relaxant effects of either cAMP or cGMP could be mediated by cGMP protein kinase-dependent activation (18).

It is unclear if the relaxation to 17β-estradiol involves changes in calcium influx as has been suggested in experiments on rabbit coronary rings (9) and rat aortic rings (19). A primary effect of estrogen on coronary arteries may involve $Ca^{2+}$ and voltage-activated $K^{+}$ channels (16). A portion of relaxation may reflect direct inhibition of potential sensitive and receptor-operated calcium channels as also has been suggested for uterine arteries (20).

Cyclic AMP has been reported to increase the efflux of $Ca^{2+}$ from smooth muscle strips within minutes after its addition (21). Since cAMP increases intracellular pH and increased pH stimulates the $Ca^{2+}$ pump, it is possible that such alkalization could be responsible for the cAMP-dependent increase of the $Ca^{2+}$ extrusion from the cell (22).

In our experiments, $RU^{38486}$ significantly inhibited the relaxation of bovine coronary vessels in response to 17β-estradiol, which is consistent with a need for estrogen receptor activation to elicit relaxation. Estrogen receptors have already been found in rat coronary artery smooth muscle cells (23), but the rapid vasorelaxation induced by high concentrations of estrogen excludes a genomic mechanism in the nucleus and indicates the possibility of non-genomic cell surface membrane binding sites (estrogen receptor) as have already been found at the outer surface of endometrial cells (24).

The physiological nanomolar concentrations of 17β-estradiol were unable to produce significant relaxation of coronary arteries in vitro. The relaxation is achieved with concentrations approaching the micromolar range. The experimental physiological solution does not contain steroid binding proteins. To more closely simulate physiological conditions, a higher concentration of free hormones is required. Thus, we used doses up to 30μM/liter.

## Conclusion

Based on our study, 17β-estradiol causes a dose-dependent relaxation in bovine coronary arteries that does not appear to utilize endothelium, prostaglandins, cGMP or arginine products, but may involve cAMP and possibly estrogen receptors. We have described a novel mechanism of estrogen relaxation that previously has only been suggested (19). The same mechanism of vasorelaxation was presented for progesterone, another steroid hormone, in placental human vessels in vitro (25).

Since the 17β-estradiol-induced relaxation is endothelium-independent, treatment by 17β-estradiol may be used as a protection against myocardial ischemia in patients with atherosclerotic vessels.

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# Melanoma: Latest diagnosis methods, surgical treatments and follow-up procedures

***DAVID CORNISH, MSI***
*Pre-Med Student, Waynesburg College, Waynesburg, Pa.*

***MONICA SMITH, R.N., B.S.N.***
*Wheeling Hospital, Wheeling*

***E. PHILLIPS POLACK, M.D., F.A.C.S.***
*Plastic Surgery, Inc., Wheeling*

**Editor's Note:** ***Dr. Polack's practice, Plastic Surgery, Inc., has for years offered undergraduate health sciences students the opportunity to observe in the office, as well as during hospital rounds and in the operating room. This is a non-hands on position during the summertime so they can garner "the flavors of the practice of medicine." David Cornish wrote this paper during his preceptorship and it reflects the current practice parameters and standards of Plastic Surgery, Inc. Dr. Polack hopes that other physicians might be interested in offering similiar options to health science, undergraduate students or premed students and wanted to share this article because of the information it has to impart.***

## Abstract

***Melanoma is a disease that is estimated will affect approximately 1 in 80 Americans. It is a potentially lethal cutaneous malignancy that requires initial diagnosis by full thickness incisional or excisional biopsy followed by appropriate surgical care. Prospective randomized studies for adjuvant therapy with intermediate (0.76-4 mm. Breslow depth), and deeper (4 mm. or greater Breslow depth) lesions will be discussed. This paper outlines an algorithm for lifelong postoperative clinical follow-up.***

## Introduction

Melanoma, a potentially lethal cutaneous malignancy, has increased in incidence so that it is now estimated to affect 1 in 80 individuals. The magnitude of this disease compels us to present in written form what experience and review of the medical literature has taught us to be a reasonable plan from the time of diagnosis through the acute treatment phase and subsequent follow-up of the melanoma patient.

As in any treatment algorithm, there is the caveat that this may change based on contemporary information and the fact that the discipline of cutaneous malignancies is evolving rapidly.

## Clinical diagnosis

Early detection in primary melanoma is essential because curability is directly related to the invasion depth of the melanoma, and it is presumed to progress over time (1).

It is important for the public as well as physicians to be able to recognize the features of melanoma. A helpful nemonic for the evaluation of pigmented skin lesions, (ABCDE), is:

* A - Asymmetry of the lesion;
* B - Border irregularity of the lesion;
* C - Color change or variable pigmentation of the lesion;
* D - Diameter > 6 mm of the lesion (size of a pencil eraser); and
* E - Evolution or change

If these characteristics are present, full thickness excisional or incisional biopsy is mandatory to rule out a melanoma. In most cases, excisional biopsy is by far the preferred course of treatment. Other signs, such as elevation, burning, itching, pain, or bleeding, generally signify more advanced melanoma.

## Current statistics

Worldwide, the incidence of melanoma is increasing faster than any other cancer (2). The American Academy of Dermatology projects that individuals born in 1999 will have a 1 in 79 chance of developing melanoma -- a 1900% increase from 1930.

Melanoma is the cause of six out of seven skin cancer deaths, but due to earlier detection the likelihood of death from melanoma is declining (3). Today, it accounts for only one percent of all cancer deaths.

## Diagnosis

The diagnosis of melanoma is established by a full thickness incisional or excisional biopsy of suspicious lesions. It must be remembered that 10% of all new melanoma cases arise extracutaneously, e.g. retina, vagina, esophagus, rectum, etc.

The diagnosis can be further clarified by S-100 and HMB-45 immunohistochemical stains. These special stains are normally reserved for evaluating metastatic lesions, and generally not used in the diagnosis of primary skin lesions. S-100 is a low molecular weight, calcium-binding protein and anti S-100 antibody is used with immunohistochemistry for detection of S-100 in normal and neoplastic melanocytic tissues as well as other tissues (neurological and dendritic cells), so S-100 stain is not specific for melanocyte/melanoma cells. Its positivity in dendritic cells (in the lymph node), cartilage, and many other tumor cells including chondrosarcoma are notable.

HMB-45 is a melanosomal antigen otherwise known as GP100 and a stain of HMB-45 is used for the immunohistochemical detection of melanocytic cells and

**Table 1. An Algorithm for the Management of Malignant Melanoma.**

| Breslow Depth of Invasion | Initial Method of Diag. | Definitive Surg. Treatment | Long-Term Follow-Up |
|---|---|---|---|
| *Malignant Melanoma in situ* | Excisional biopsy - If excisional biopsy would create a significant cosmetic defect then initial full thickness incisional biopsy to establish diagnosis. | Wide excision (5 mm surgical margin does not require excision of underlying subcutaneous tissue.) | Examine for local recurrence and total body skin check with exam for pertinent lymph node basins every 3 months for 2 years, every 6 months for years 2-4, and then yearly for life. |
| *Malignant Melanoma < 1 mm* | Excisional biopsy - If excisional biopsy would create a significant cosmetic defect then initial full thickness incisional biopsy to to establish diagnosis. | Wide local excision (with a 1 cm margin including subcutaneous tissue, but not including underlying fascia.) | Examine for local recurrence and total body skin check with examination for pertinent lymph node basins every 3 months for 2 yrs., every 6 months for years 2-4 and then yearly for life. |
| *Malignant Melanoma > 1 mm to 4 mm* | Excisional biopsy - If excisional biopsy would create a significant cosmetic defect then initial full thickness incisional biopsy to establish diagnosis. | Wide excision (with a 2 cm margin including subcutaneous tissue, but not including underlying fascia) and sentinel lymph node mapping. | Screening LDH and chest X-ray prior to each clinical visit as above every 3 months for 2 yrs., every 6 months for years 2-4 and then yearly for life. |
| *Malignant Melanoma > 4 mm* | Excisional biopsy - If excisional biopsy would create a significant cosmetic defect then initial full thickness incisional biopsy to establish diagnosis. | Wide local excision with 2 cm margin including subcutaneous fat, but not including underlying fascia. Consider sentinel lymph node mapping if no palpable nodes. Refer to med. oncologist if considering adjuvant therapy. | Screening LDH and chest X-ray prior to each clinical visit as above every 3 months for 2 yrs., every 6 months years 2-4 and then yearly for life. |
| *Melanoma of the Head and Neck* | Excisional biopsy - If excisional biopsy would create a significant cosmetic defect, then initial full thickness incisional biopsy to establish diagnosis. | If > 1 mm consider adjuvant sentinel lymph node mapping. Since rad. therapy does play a role in head/neck disease, consider consultation with a rad. oncologist preoperatively. **In head/neck melanoma, width of margins may have to be reduced. Due to vital structures, i.e., a malignant melanoma of the eyelid patient would not necessarily need an exoneration of that eye to obtain an adequate margin.* | Examine for local recurrence and total body skin check for new lesions as well as pertinent lymph node basins every 3 months for 2 yrs., every 6 months years 2-4 and then yearly for life. **If depth of lesion is > 1 mm, add LDH and chest X-ray to the above listed visits.* |

their neoplastic derivatives. S-100 immunohistochemical analysis is more sensitive, but less specific for melanoma. HMB-45 stain will indicate the presence of melanosomes in the detected areas (although benign junctional melanocytes are HMB positive). The diagnosis of melanoma must be established on the grounds of pathology and cannot be made on the basis of increased immunohistochemical activity.

## Treatment

Once the diagnosis of melanoma is known, surgical removal of additional surrounding skin is required to reduce the risk of local recurrence. How much additional skin is removed is dependent upon Breslow's thickness (Figure 1).

Appropriate wide excision can reduce local recurrance to well below 3 percent (4), but local recurrence is not a frequent problem. Rather, a relatively new technique, "sentinel lymph node mapping" (SLNM), demonstrates the lymphatic drainage. This predicts the most likely node involved by metastatic melanoma if the disease has progressed to regional nodes (Stage III).

During SLNM, patients undergo lymphoscintigraphy using intradermally-injected technetium which is labeled sulfur colloid. It is injected 3 to 6 hours before the surgical procedure. The technetium-tagged sulfur colloid migrates to the sentinel node. Lymphoscintigraphy determines the general lymphatic drainage patterns and the basins at risk for metastatic melanoma.

After the appropriate interval has passed, following injection with the isotope (i.e. three to four hours), the patient is brought to the operating room where the peri lesional area is injected with 1 percent Lymphazurin(tm) blue dye. In order for this blue dye technique to be accurate, it must be performed prior to wide excision. SLNM is a standard of care in lesions 1 mm. or greater depth as recommended by a National Comprehensive Cancer Network (5).

RT-PCR (Reverse Transcriptase-Polymerase Chain Reaction) analysis at the time of Sentinel node biopsy is being investigated to augment the sensitivity of light microscopy and immunohistochemistry. Currently, RT-PCR analysis has employed one or more high markers including: tyrosinase, MART-1, gp100, and MAGE-3. (*MAGE-3 is a tumor specific antigen gp100 is the HMB-45 related marker. Tyrosinase's function is in melanin biosynthesis, and MART-1 is a melanosome marker of unknown function).*

Melanoma patients testing positive for RT-PCR analysis are designated positive for tyrosinase, and at least one other marker. Tyrosinase is a gene product specific to melanin-producing cells. A single melanoma cell can be identified in a background of 1,000,000 lymphocytes. This technique is used to "minimize false negatives." For example, by bivalving a lymph node and studying a few sections of it, the light microscopy analysis may not locate or identify melanoma cells that are localized in other regions of the lymph node.

Recent data has shown RT-PCR-based prognostic evaluations could be medically just, but more research is needed to properly evaluate RT-PCR in the care of patients (1).

## Adjuvant treatments

Immunotherapy using the biological agent interferon alpha-2b (Intron A) for high-risk melanoma patients has been studied. These patients have either deep primary lesions (i.e. 4 mm. Breslow's depth or greater T3 NO MX) or primary melanoma with disease in a nearby lymph node TX N1 M0 (6).

Interferon alpha-2b is presently produced by recombinant DNA technology, but was previously harvested from blood (a leukocyte strain). It is one of several kinds that is being tested as adjuvant treatment for high-risk patients in danger of relapse. Some side effects of the drug include fatigue, fever and chills, muscle aches, lack of appetite, and headaches (most symptoms can be controlled with acctominaphen). Less common side effects are nausea and vomiting, for which anti-emetics are usually successful. Depression is also a possible side effect and anti-depressant therapy may be of benefit for this complication. Liver function tests and white blood cell counts should be carefully monitored in these patients and the dose adjusted when necessary.

Two major trials by the Eastern Cooperative Oncology Group have shown varying results in the use of alpha interferon in an adjuvant setting for high risk patients. The first trial, E1684, produced results that showed interferon did prolong both relapse free and overall survival. (6). The second, E1690, demonstrated prolongation of continuous relapse-free survival, but not overall survival for interferon therapy. What appears to account for the difference is the frequent occurrence of cross over "salvage" therapy in the E1690 trial, which was not a consideration in the earlier trial El684.

The ongoing Sunbelt Melanoma Trial is a multicenter trial of adjuvant Interferon Alpha-2b for melanoma patients with early lymph node metastasis detected by lymphatic mapping and sentinel lymph node biopsy. This study is expected to provide information about Interferon alpha-2b therapy for patients with histologically or immunohistochemically positive sentinel nodes and about patients with histologically and immunohistochemically negative nodes, but who have RT-PCR positive sentinel nodes.

Additional clinical trials for advanced melanoma (T4 N1 M0) that are currently being tested include two different tumor specific antigens against melanoma. The first consists of a highly purified substance known as GM2, found on melanoma cells, and is designed to stimulate an immune response against melanoma (7). The second type of vaccine is a cruder, whole-all vaccine composed of several different tumor lines, antibodies already targeted at the cancer are used to guide the immune system to attack cancer cells (3).

Modern techniques of molecular biology and immunology have allowed definition of a large number of melanoma-associated antigens (MAA). These antigens can induce

an immune response in patients with melanoma. If there are common MAA shared by melanoma patients, "generic" melanoma vaccines could be developed. This means that one vaccine could benefit all melanoma patients. The ability to control immune response by a vaccine to these MAA, both humoral and cell-mediated, has changed the research for vaccine use on melanoma patients from an interesting project to a potentially productive therapy for melanoma (3), albeit to date there is no defined role for vaccine.

The National Cooperative groups have been conducting three controlled trials to further define the roles of interferon therapy, vaccine therapy, and chemotherapy in melanoma patients. The first study, ECOG-1694, compares post-surgical therapy with the vaccine GM2-KLH/QS-21, to high-dose interferon alpha-2b in node positive patients. The second study, EGOG-3695, compares combination chemotherapy (cisplatin, vinblastine, dacarbazine), (±) plus or minus interleukin-2, and interferon alpha-2b vs. the combination chemotherapy alone in patients with metastatic melanoma.The third study examines the role of post-surgical radiotherapy to the appropriate draining nodal basins depending on location of the lesion, (i.e. cervical, axillary, or inguinal basins) with high-dose interferon alpha-2b in patients with metastatic melanoma. The results of these studies should all be know by the time this article is published.

## Conclusion

Early detection and excision of primary melanoma is the best way to assure a favorable outcome (4) and currently represents the optimal curative therapy. Treatment is based on the pathologic diagnosis and depth of invasion, i.e. Breslow's Depth. This is a measure of the thickness of the tumor.

While Breslow's depth is of primary importance, Clark's level of tumor invasion, which describes to what level of the skin the tumor has progressed, is rarely used today, but can also provide more prognostic value for thin melanomas (4).

A detailed light microscopic analysis of the biopsied specimen will support diagnosis of melanoma and will direct the formation of a treatment plan. Once a tissue diagnosis has been made, wide local excision at the lesion site is required with varying margins depending on tumor depth (Figure 1). Other treatments such as sentinel lymph node mapping provide new insights into the tumor staging. Sentinel lymph node mapping is becoming the standard of intermediate depth lesions, i.e. when the Breslow Depth is 1 mm. or greater. A follow-up plan for melanoma patients is also outlined in Figure 1 and is as follows:

1. Superficial lesions (Breslow's depth < 1 mm)
   a. Check-up every 3 months for 2 years, then every 6 months for years 2-4, then yearly check-ups for life. Check-ups should include b and c below.
   b. Total body check for new lesions or local recurrence.
   c. Examination of pertinent lymphatic basins.

2. Intermediate lesions of greater depths (Breslow's depth > 1 mm)
   a. Same as above
   b. LDH and chest X-ray
   c. Total body check for new lesions or local recurrence
   d. Examination of pertinent lymphatic basins.

Long term follow-up with the primary physician, surgeon, or dermatologist at regular intervals is an integral part of melanoma disease management (8).

## Acknowledgements

The authors wish to acknowledge the efforts of Gregory Merrick, M.D., Schiffler Cancer Center; Thomas Przybysz, M.D., medical oncologist in private practice; Edward Adamovich, M.D., pathologist, Wheeling Hospital; and John M. Kirkwood, M.D., professor and vice chairman of Clinical Research, Dept. of Medicine, University of Pittsburgh Medical Center; and director of the Melanoma Center at University of Pittsburgh Cancer Institute; for their advice concerning this manuscript.

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***(Please contact the first author for the other references in this article.)***

# Agenda set for Mid-Winter Conference & Annual Business Meeting at The Homestead

The preliminary schedule has been announced for the WVSMA's 2001 Mid-Winter Clinical Conference and Annual Business Meeting which will take place March 1-4 at The Homestead in Hot Springs, Va.

This combined meeting will feature an Executive Committee Business Meeting on Thursday, March 1 at 4 p.m., with a Council Meeting scheduled for 5 p.m. The meeting will officially begin the next day at 9 a.m. with the First Scientific Session, which will feature a presentation on *"Liability Insurance Issues"* and the popular *Stump the Audience* segment. The Second Scientific Session is planned for 1 p.m. that afternoon and Friday's other events will include a WESPAC Board Meeting at 5 p.m. and a reception sponsored by the WVU School of Medicine and the Marshall University Joan C. Edwards School of Medicine at 5:30 p.m.

**Edwards**

Saturday's agenda will begin with a WVSMA Surgery Section Breakfast Meeting with the lecture *"Technical Details of Successful Sentinel Lymph Node Staging for Breast Cancer"* by Michael J. Edwards, M.D., associate professor of surgery at the University of Louisville. Dr. Edwards will also deliver this year's Thomas L. Harris Address at the meeting. His address is entitled *"The Impact of Sentinel Lymph Node Staging on Adjuvant Therapy Decisions for Breast Cancer."*

Dr. Edwards is a native of Georgia who received his M.D. degree from Emory University in 1981. He completed his internship and residency in general surgery at the University of Louisville.

Following his residency, Dr. Edwards completed a fellowship in surgical oncology at M.D. Anderson Hospital in Houston and then returned to the University of Louisville in 1989 to join the faculty as an assistant professor of surgery. Dr. Edwards currently is an associate professor of surgery at U of L, where he also serves as an associate professor in the Center of Excellence in Applied Microcirculatory Research and in the Department of Physiology and Biophysics.

Dr. Edwards is the founder and director of The National Registry of Image-Guided Breast Biopsy, and is a fellow of the American College of Surgeons. He is a noted cancer researcher and author who has published nearly 160 scientific articles. He is an associate editor for *New Surgery* and currently serves on the editorial boards for *Oncology Reports*, *Cancer Therapeutics*, *Annual of Surgical Oncology* and the *American Journal of Surgery*.

### Other meeting events

The Third Scientific Session is set for 9 a.m. on Saturday and the First Session of the House of Delegates will convene at 1:30 p.m. that afternoon, with the Second Session planned for Sunday at 9:15 a.m. These sessions of the House of Delegates have been scheduled during the weekend to allow as many physicians as possible to attend.

An outline of the agenda for the meeting is published at right or you may phone the WVSMA at (304) 925-0342 for more information. A preliminary program for the meeting will be mailed soon.

## WV Supreme Court Upholds Cap . . . Barely

For the second time in the decade of the 90s, the WV Supreme Court of Appeals has upheld the constitutionality of the $1 million cap on non-economic damages. The margin on the court's vote, however, has narrowed considerably which should be a real cause of concern for every WV physician.

In 1986, the Legislature responded to a malpractice liability crisis by enacting modest liability reform legislation. One element of the package was to cap at $1 million the amount that can be awarded for non-economic damages. The first challenge to the cap was brought in 1991, claiming the Legislature's action was unconstitutional. The court, in a unanimous (5-0) decision, upheld the cap saying the Legislature was within its constitutional powers to impose the cap. Earlier this year, the Supreme Court accepted for review again the constitutionality of the $1 million cap. In a 3-2 split, the Supreme Court ruled in mid-December again that the cap was constitutional. Justices McGraw and Starcher were the two minority votes that disagreed with the majority's opinion.

Copies of the court's opinion are available from the WVSMA by calling (800) 257-4747 or 925-0342.

# WVSMA's 2001 Mid-Winter Clinical Conference
# &
# Annual Business Meeting

***The Homestead***
***Hot Springs, Va.***

***Thursday, March 1***

| | |
|---|---|
| 4 p.m. | WVSMA Executive Committee Business Meeting |
| 5 p.m. | WVSMA Council Meeting |

***Friday, March 2***

| | |
|---|---|
| 8:30 a.m. - 5 p.m. | Registration |
| 9 a.m. - Noon | FIRST SCIENTIFIC SESSION |
| 1 p.m. - 5 p.m. | SECOND SCIENTIFIC SESSION |
| 5 p.m. | WESPAC Board Meeting |
| 5:30 p.m. - 7 p.m. | Reception *(WVU-Marshall University Joan C. Edwards Schools of Medicine)* |

***Saturday, March 3***

| | |
|---|---|
| 7:30 a.m. - 8:30 a.m. | WVSMA Surgery Section Breakfast Meeting |
| 8 a.m. - 9 a.m. | Medical Education Committee Meeting |
| 8:30 a.m. - 5 p.m. | Registration |
| 9 a.m. - Noon | THIRD SCIENTIFIC SESSION |
| Noon | Specialty Luncheon Meetings<br>*(Various chapters of West Virginia Specialty Societies will be scheduled for luncheon/business and scientific meetings.)* |
| 1 p.m. - 1:30 p.m. | Delegate Registration |
| 1:30 p.m. - 4 p.m. | FIRST SESSION OF THE WVSMA HOUSE OF DELEGATES<br>Introductions & Recognitions<br>Constitution and Bylaws Committee Report<br>Nominations Committee's Report<br>Announcement of 2001-2002 Candidates for Office<br>Introduction of Resolutions |
| 4 p.m. | Resolutions Committee Meeting Open/Closed |
| 5 p.m. - 6 p.m. | Scientific & Educational Sessions Committee Meeting |
| 6 p.m. | Reception *(Medical Assurance)* |

***Sunday, March 4***

| | |
|---|---|
| 8 a.m. - 9 a.m. | Delegate Voting and Registration |
| 9:15 a.m. | SECOND SESSION OF THE WVSMA HOUSE OF DELEGATES<br>Reaffirmation<br>Necrology Report<br>Harris Address<br>WVSMA Alliance President's Report<br>Announcements of Election Results<br>Constitution and Bylaws Report<br>Resolution Committee's Report |

# Women's Health Policy Conference set for February

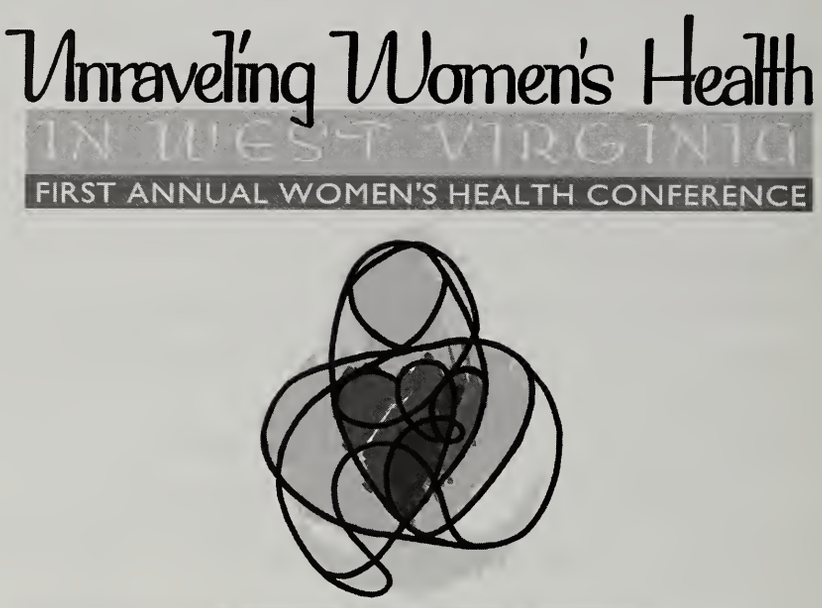
The First Annual Women's Health Policy Conference entitled *"Unraveling Women's Health in West Virginia"* will take place on Friday, February 23 at the Town Center Marriott in Charleston.

This event is being spearheaded by women legislators to raise awareness of women's health as an issue and to define women's health policy initiatives. The Women's Health Policy Conference is sponsored by recognized leaders in health care including the West Virginia State Medical Association, West Virginia Hospital Association, Camcare Health Education and Research Institute, West Virginia Women's Commission, Office of Women's Health, West Virginia Nurses Association, Center for Healthcare Policy and Research, WV Bureau for Public Health, WVNOW and the Office of Maternal and Child Health.

Elizabeth Lee Vliet, M.D., a long-standing advocate for women's health and author of *"Screaming To Be Heard: Hormonal Connections Women Suspect . . . And Doctors Ignore,"* has agreed to be the keynote speaker for the event. The Women's Health Policy Conference will feature workshops on topics of importance to West Virginia women ranging from domestic violence to lifestyle as a factor in women's health. There are also plans for workshops on preventative screenings, mood disorders and minority health issues and continuing education is available to nurses, physicians, counselors and social workers.

"We are very excited and thrilled to be involved with this landmark conference," said Cheri Heflin Montgomery, executive director of the West Virginia Nurses Association. "Women's health in West Virginia suffers in part because it is not given enough attention. In recognizing and addressing issues such as screening and how personal behaviors can influence health, we are improving the way in which women and health care providers can prevent and manage illness."

For more details or to register, please call Emily Bennington at (304) 342-6970 or e-mail her at emily@imaginethathype.com.




# Appalachian Bible College to host bioethics conference in March

The Center for Bioethics and Human Dignity, the Christian Medical & Dental Associations and Trinity International University together with Raleigh General Hospital and the West Virginia Network of Ethics Committees will present "Breathtaking Decisions Bioethics Conference" from March 9-10 at Appalachian Bible College in Beckley.

This conference will feature managed care, public policy, genetic technology and end-of-life issues and is open physicians, physician assistants, nurses, clergy, attorneys, educators, social workers, paramedics, health care administrators and anyone interested in end-of-life issues. CME, CDE and CEU credits will be offered.

Featured speakers include C. Ben Mitchell, M.Div.,Ph.D., of the Ethics and Religious Commission of the Southern Baptist Convention; Edmund D. Pellegrino, M.D., of Georgetown University; and Alvin H. Moss, M.D., director of the Center for Health Ethics and Law at WVU.

For more conference details, call (304) 256-4346, or if you would like more information about the Center for Bioethics and Human Dignity, phone (847) 317-8180.

# Dr. Massenburg appointed to BC/BS national council

Jerome D. Massenburg, M.D., C.M.C.M., F.A.P.A., has been appointed to the National Council of Physician Executives. This group is composed of 20 physicians from within the Blues System and serves as advisors with the Blue Cross and Blue Shield Association.

The members of this council provide the BCBSA with strategic advice on emerging business and policy issues such as *Blues*Connect Network Participation Standards and ways to improve relationships with professional groups and physicians at the local level.

# CME & Special Events

## Camcare Health Educ. & Research Institute

***"Vasculitis"***
Jan. 17, noon, John W. Byrd, M.D., Plateau Medical Center, Oak Hill

***"West Virginia Trauma Symposium"***
Jan. 18-19, James Kessel, M.D., David Denning, M.D., Peter Mucha, M.D., and David Kappel, M.D., program chairmen, Snowshoe

***"Cardiology Conference at Snowshoe"***
Feb. 4-7, William Carter, M.D., program chairman, Snowshoe

***"Unraveling Women's Health in West Virginia"***
Feb. 23, Town Center Marriott, Charleston

***"Advanced Cardiac Life Support Renewal Course"***
March 9, March 30, May 4 & June 8, 8 a.m. - 4:30 p.m., Robert C. Byrd HSC of WVU, Charleston Division, Charleston

***"Advanced Cardiac Life Support Provider Course"***
March 10-11, March 30-April 1, May 5-6 & June 25-26, 8 a.m. - 4:30 p.m., Camcare Institute Education and Training Center, Charleston

***"Pediatric Advanced Life Support Provider Course"***
March 19-20, April 20-21 & May 16-17, 8 a.m. - 4:30 p.m., Camcare Institute Education and Training Center, Charleston

***"Pediatric Advanced Life Support Renewal Course"***
March 21 & April 22 & May 16-17, 8 a.m. - 4:30 p.m., Camcare Institute Education and Training Center, Charleston

***"28th Annual Newborn Day"***
March 22-23, Stefan R. Maxwell, M.D., Program Chairman, Embassy Suites,

***"Pain Management Conference"***
April 27-28, Timothy R. Deer, M.D., Program Chairman, Embassy Suites, Charleston

***"OB/GYN Update: Pre-Conference for Family Physicians"***
May 3, E. Reed Heywood, M.D., & Mark Gibson, M.D., Program Chairman, Lakeview Resort & Conference Center

## The Joan C. Edwards School of Medicine at Marshall University

***"National Procedures Institute"***
Feb. 8-10, 7:30 a.m. each day, Radisson Hotel

***"Annual Research Day"***
March 12-13, Marshall University Medical Center & Radisson Hotel

## Robert C. Byrd HSC - Morgantown

***"Urology Mock Boards"***
Jan. 11-13, Embassy Suites, Pittsburgh

***"Perinatal Health Summit"***
March 22-23, Charleston

***"7th Annual Stephen C. Rector Visiting Lectureship in Emergency Medicine"***
April 6 (tenative), Robert C. Byrd HSC, Morgantown

***"American Academy of Pediatrics, WV Chapter, Annual Meeting"***
Location TBA

***"Sentinel Lymph Node Workshop"***
April 26-27 (tenative), Robert C. Byrd HSC, Morgantown

***" Integrative Medicine Conference"***
April 27-28 (tenative), Robert C. Byrd HSC, Morgantown

***"WV State Society of Anesthesiology Annual Meeting"***
The Greenbrier, White Sulphur Springs

## West Virginia State Medical Association

***"WVSMA's Mid-Winter Clinical Conference & Annual Business Meeting"***
March 1-4, The Homestead, Hot Springs, Va.

# Bureau for Public Health News

**December 2000**

**Open letter to: West Virginia Congressional Delegation**
**Governor-elect Bob Wise**
**Local Health Departments**
**All physicians, nurses, public health practitioners in West Virginia**

**From: Henry Taylor, M.D., M.P.H.**
**State Health Officer**
**West Virginia Bureau for Public Health**

This past summer, the Centers for Disease Control in Atlanta advised all state health departments to expect and prepare for delays in the delivery of the influenza vaccine for this season. Citing a variety of manufacturing difficulties involving biological as well as legal issues, the CDC warned states that delays in the arrival of vaccine could create complications for traditional flu prevention efforts. In addition to providing communications strategies for keeping state health departments informed and addressing the public's concerns, the CDC recommended prioritization of the vaccine for people who meet at-risk criteria.

Those of us involved in disease prevention at the West Virginia Bureau for Public Health, a group which includes physicians, nurses and epidemiologists in the Office of Epidemiology and Health Promotion, Division of Surveilance and Disease Control, and the Office of Community and Rural Health Services, agreed that the CDC's prioritization strategy would be the most effective way to insure that as vaccine arrived it would be made available to the people who could benefit most from it.

The state of West Virginia purchased 50,000 doses of flu vaccine, slightly more than last year, for distribution to all local health departments. At the end of November, West Virginia had received 71% of its total order in three shipments, and there had been no confirmed cases of influenza reported.

Since August, the Bureau for Public Health has been in contact with our flu vaccine manufacturer, Aventis-Pasteur, getting updates almost daily on manufacturing progress and delivery projections. Aventis-Pasteur has promised the state it would deliver the remainder of its order by December 8. Additionally, some states may make application for supplemental allotments of vaccine from the CDC, which purchased an additional 9 million doses this season.

As State Health Officer for West Virginia, I am gratified by the level of cooperation and support exemplified by our local health departments under these extraordinary circumstances. Leadership at the local level has demonstrated time and again their professionalism and expertise in conducting effective, orderly flu vaccine clinics, often under unusually difficult circumstances. Thanks to their efforts, the public generally appears to be well-informed about the flu vaccine delay, the reasons why at-risk people should have priority access, and what some of the at-risk criteria are. One has to acknowledge and admire the level of dedication and capability regularly exhibited by West Virginia's local health departments.

In West Virginia, the peak of the flu season is traditionally between mid-January and early March. Assuming that Aventis-Pasteur is able to honor their commitment to deliver the remainder of our supply in early December, we expect that anyone in West Virginia who wants to get a flu shot will have an opportunity to do so before the peak of the flu season arrives. Epidemiologists at the Bureau for Public Health do not expect the delay of the vaccine to cause any unusual spikes in the number of flu cases this season.

However, I want to echo some of the concerns that I and others in the public health community have already voiced. There are issues surrounding this year's delay in the delivery of flu vaccine that portend serious consequences for the viability of disease prevention efforts, not only in West Virginia but across the nation.

l am deeply concerned that the practices of some manufacturers and distributors may be undermining the confidence of the general public in the public health system. Obviously, when the public health system cannot meet the demand for vaccine in the communities, some people will begin to question the reliability of their local health department. As anyone involved in public health and disease prevention can verify, you can't practice public health effectively without the public's trust and confidence.

Some influenza vaccine manufacturers have repeatedly shifted delivery dates and vaccine allotments from original agreements. This practice of continually "moving the goal posts" has had a profound impact at the local level, forcing local public health leadership to deal with credibility issues that surface during hundreds of phone calls, public meetings and chance encounters with community members.

ln addition, some distributors have made vaccine available to commercial, corporate and retail entities who have used the vaccine as a promotional tool. Many of these entities have administered the vaccine to anyone willing to pay until supply ran out, contradicting the at-risk prioritization policy advanced by federal, state and local authorities. This practice has circumvented the traditional flow of vaccine supply to local health departments.

Recent articles appearing in *The New York Times* have uncovered anecdotal evidence of commerical, corporate and retail entities paying inflated prices in exchange for priority delivery dates far in advance of some state health departments that had placed their orders months earlier. West Virginia paid a little less than $25 per ten-dose vial of vaccine. *The New York Times* reported instances where flu vaccine had been shipped early to some buyers at $100 to $150 per 10-dose vial.

These unscrupulous practices in the name of profit-taking, during an already difficult situation, have served to undermine the public health community's credibility with the people it strives to serve. lt has also created the potential for adverse health consequences in the at-risk population.

l feel it is my statutory duty as state health officer for West Virginia to urge all members of the West Virginia Congressional Delegation, Governor-elect Bob Wise, all physicians, nurses, public health practitioners and the public they serve, to join together in calling for a full investigation and re-evaluation of the policies and practices of influenza vaccine production and distribution. It is essential that we insure that vaccine distribution policies serve the greater public good.

Equity is the elemental philosophic value in public health today. In the public health system, we need to make certain that we direct our available resources to those in greatest need first, not necessarily to those with the ability to pay the greatest fee. The implications of the unscrupulous practices exhibited by some vaccine manufacturers and distributors extend beyond influenza into public safety, and even into arenas like bioterrorism response capacity.

Resolved in our determination to meet the threats and challenges of public health in the new millennium, we depend upon the strong, conscientious support of federal, state and local leadership to ensure our success in preserving the viability of disease prevention measures within the public health system

Henry G. Taylor, M.D., M.P.H.
Commissioner, Bureau for Public Health

# Robert C. Byrd Health Sciences Center of West Virginia University News

## WVU offering mobile PET services in state

WVU's Robert C. Byrd Health Sciences Center has entered into a partnership with Alliance Imaging, Inc., and several West Virginia hospitals to bring positron emission tomology imaging to the rest of the state. PET units will visit several cities throughout the state on a regular schedule. The frequency of visits will be dependent on usage, but the service will be available, at minimum, once every two weeks.

As a part of this service, WVU will offer PET training, and continuing education, to radiologists and other physicians in each community. Other cities many be added in the future.

WVU's success in offering PET in Morgantown has been due in large part to the determination of the state's medical community to make sure patients are afforded the highest standard of care. The Center for Advanced Imaging at WVU has reached capacity in its ability to schedule patients for PET tests in Morgantown on a timely basis. The addition of up to three mobile units, based on patient and physician demand for this service, will mean that the most advanced diagnostic imaging in the world is available in every part of West Virginia.

Alliance Imaging, Inc., is the nation's leading provider of medical diagnostic services. WVU will continue to provide medical supervision of this project, under the direction of Dr. Naresh Gupta.

## Dr. Neal studies heart risk in children

Dr. William Neal, pediatric cardiology, is conducting research in 14 counties to determine if cardiovascular risk factors exist in grade school children. Participating counties are: Boone, Barbour, Clay, Grant, Greenbrier, Hardy, Lincoln, Marshall, Mason, Monroe, Ritchie, Taylor, Wayne, and Wyoming.

Fifth-graders are given cholesterol and BP tests to determine if they fall into the category of "at risk." In addition to a list of lifestyle and diet recommendations, these students and their parents are offered further testing at no cost.

This program is in its third year and one of its goals is to determine likely heart disease candidates at an early age. School-wide and individual intervention strategies are being tested in collaboration with the WV Rural Health Education Partnership. Dr. Neal has a $100,000 grant from the Claude Worthington Benedum Foundation to help fund the study.

Dr. Neal has been a WVU physician since 1974. He has treated hundreds of West Virginia children for heart problems in clinics across the state.

## Dr. Moss named Distinguished West Virginian at summit

Dr. Alvin H. Moss, director of the Center for Health Ethics and Law, was recently named a Distinguished West Virginian at the 2000 Summit of the West Virginia Initiative to Improve End-of-Life Care. The award acknowledges Dr. Moss' work to improve end-of-life care in the state.

## Dr. Doyle named to Workers' Comp post

Dr. Edward J. Doyle, director of the WVU's Institute for Occupational and Environmental Health, has been appointed to the Interdisciplinary Examining Board of the WV Worker's Compensation program. This board is responsible for determining if injured workers qualify for permanent total disability benefits.

## Community Medicine receives gift from Avashia family

Dr. Bipin Avashia, a Charleston physician, and his wife, Rita, have created the Avashia Family Fund for the Promotion of Healthy Lifestyles in West Virginia.

This gift will support WVU's Dept. of Community Medicine in its goal of educating students, doctors, nurses, other health professionals, and the public about good health practices and healthy lifestyles.

## Family Medicine Center lobby named for Beckley physician

WVU has dedicated the lobby of the Sleeth Family Medicine Center to the memory of Dr. and Mrs. Ross P. Daniel in a recent ceremony.

Dr. Daniel, born in 1898, practiced medicine in Raleigh County for 50 years. As a general practitioner, he treated thousands of patients, including assisting mothers in childbirth. By 1962, when he retired from obstetrical work, he had delivered 4,252 babies. He was the oldest practicing physician in the county when he died in 1974.

The Daniels' son and daughter-in-law, Dr. C. Richard Daniel and Barbara Shumaker Daniel, attended the event. Dr. Richard Daniel, a graduate of the WVU School of Medicine, retired a few years ago after nearly 40 years in medicine, including serving as chief of radiology and chief of staff at Raleigh General Hospital for many years.

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# Marshall University Joan C. Edwards School of Medicine

## Young smokeless tobacco users unaware of its dangers

Smokeless tobacco users have less awareness of the dangers of their habit than non-users, according to a survey of West Virginia public school students.

"West Virginia has the highest prevalence of adult smokeless tobacco use in the United States," according to Lynne J. Goebel, M.D., F.A.C.P., the survey's lead author. "Many West Virginia users see smokeless tobacco as a safe alternative to cigarettes. Education programs emphasizing that all tobacco products are dangerous and highly addictive are needed."

Every day approximately 2,200 U.S. youths, ages 11 to 19, try smokeless tobacco for the first time, and approximately 830 become regular users, according to a national study cited by the researchers.

Dr. Goebel and her colleagues compared 648 non-users with 160 users of smokeless tobacco. Study participants were all male youths in the fifth, eighth and eleventh grades in West Virginia public schools during the 1996-97 school year. The researchers excluded females from the study since so few use smokeless tobacco.

The researchers found that 7 percent of fifth graders, 22 percent of eighth graders, and 32 percent of eleventh graders used smokeless tobacco monthly or daily. The most frequent grade for initiation was the seventh grade, and 10 percent of the study participant users tried snuff or chewing tobacco as early as first or second grade.

Only 74 percent of users knew that smokeless tobacco is harmful to their health, compared to 91 percent of non-users. In addition, users were four times more likely to believe that smokeless tobacco was safer than cigarettes, Goebel and colleagues found.

Smokeless tobacco is not a safe alternative to smoking, according to the American Cancer Society. Use of smokeless tobacco can lead to cancer of the mouth and pharynx; leukoplakia, or mouth sores that lead to cancer; gum recession, or peeling back of gums; and abrasion of teeth.

Smokeless tobacco users were more likely than non-users to have a family member not living in the home who also used smokeless tobacco, to have a close friend who used smokeless tobacco, to play school football, to have tried cigarettes and to have parents who let them use smokeless tobacco at home. The study results are published in the current issue of *Nicotine and Tobacco Research*, which is the official peer-reviewed journal of the Society for Research on Nicotine and Tobacco.

The researchers were initially surprised to find relatives not living in the home influenced the use of smokeless tobacco more than immediate family members. "One hypothesis to explain this fact is that uncles and cousins living nearby may act as both peers and family members, and thus exert a stronger influence than brothers and fathers," said Dr. Goebel.

The researchers noted that because smokeless tobacco occupies a unique role in the Appalachian culture, the study results can't be generalized to the United States as a whole. "Among some West Virginians, family and friends see the ability to tolerate tobacco without becoming nauseated as a sign of manhood," said Dr. Goebel. "Our study showed that family permitting use in the home was strongly correlated with use of smokeless tobacco."

West Virginia tobacco use prevention programs should begin early, in elementary school, said Dr. Goebel and colleagues, who also suggested targeting young athletes, especially school football players.

"The tobacco industry's multi-billion dollar advertising campaign portrays smokeless tobacco users as 'cool, macho, and attractive.' Although children will not admit that advertising influences them, underage smokers use the most heavily advertised brands," said Goebel. "Our study showed that users more often described themselves as 'cool, macho and attractive,' consistent with the image portrayed in the ads."

The study's co-authors were Drs. Richard Crespo, Rachel Abraham and Saba Masho of Marshall University; and Dr. Elbert Glover of West Virginia University. The research was supported by a grant from the West Virginia Prevention Research Center.

## Five students receive health sciences scholarships

Five Marshall students have received $10,000 health sciences scholarships from the State of West Virginia to complete their training in the primary care fields of general/family medicine, general pediatrics, general internal medicine, obstetrics/gynecology, or general psychiatry. In exchange, the students have comitted to practice for two years in an underserved, rural area of West Virginia.

The students and their hometowns are as follows:

Lorrie Kirchner Downs, Wheeling;
Matthew P. Downs, Huntington;
Carol Lynn Patterson, Huntington;
Sarah J. Rinehart, Elkins; and
William C. Wallace, Pullman

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# West Virginia School of Osteopathic Medicine News

## Greenbrier Military School Alumni constructing museum

Over 200 graduates of Greenbrier Military School and GMS supporters recently participated in groundbreaking ceremonies for the construction of a museum for GMS artifacts and memories on the WVSOM campus grounds, which was formerly the GMS campus.

Entitled The Greenbrier Forever Project, this project will provide for the museum, which will house artifacts and be the focal point for reunion activities, as well allow for the expansion of a conference center within the same building. Congressman Alan Mollohan, an alumnus of GMS, and Congressman Nick Joe Rahall, brough greetings to those gathered on October 20 and were thanked for their efforts in securing the federal funding that made the project possible.

Remembering his days at GMS, Congressman Mollohan said, "GMS produced citizens of outstanding character. In 1972, GMS closed its doors. As we gather today, we open the door on a new beginning. This project ensures the great history of GMS will be preserved for posterity and her name will never die."

Congressman Rahall complimented WVSOM President Olen E. Jones Jr. for his support of GMS activities on campus, adding "This project presents many opportunities for GMS get togethers. It also serves the growing needs of Lewisburg and the entire Greenbrier Valley."

Dr. Jones congratulated those involved in the success of the Greenbrier Forever Project, noting their unflagging comitment to seeing the project though. Specifically mentioned were Congressman Mollohan and Rahall, the GMS Alumni Association, its board of directors and the Greenbrier Forever Committee. The ceremony was held in conjunction with the annual GMS reunion.

## Loan default at zero percent

According to the latest report from the U.S. Dept. of Education, none of the federal loan borrowers at WVSOM who entered into repayment in 1998 are in default on their loan payments. This is the second year in a row that the school has checked in with a zero percent average.

"I am extremely pleased that our graduates are not only meeting the school's mission of becoming primary care physicians, but they're also meeting their medical school loan obligations," says Sharon Howard, WVSOM's director of financial aid. She attributes the low rate to the employability of graduating physicians as well student loan counseling programs that teach students the repercussions of defaulting on loans.

## Two students named to national posts with SOMA

Two students were appointed to positions in the national Student Osteopathic Medical Association (SOMA) during the recent annual American Osteopathic Association convention in Orlando.

Fourth-year medical student Craig Warren of Pontoine, Miss., was named president, and second-year med student Jeremy Mills of Kouts, Ind., was named Region II trustee. Both students were chosen from all 19 osteopathic schools nationwide to represent SOMA for the 2000-2001 term.

## New faculty announced

Shannon Warren was named the new director of Alumni Relations and Continuing Medical Education. In her new position, Warren is responsible for all facets of alumni relations, including scheduling and managing CME programs, special events, meetings, and class reunions. She also produces the edits the alumni newsletter, alumni director and supervises the maintence of the alumni database.

Patricia Perkins has been hired as an admissions counselor. In her new position, Perkins is responsible for contacting prospective students about the application process and opportunities at WVSOM by visiting colleges throughout West Virginia and bordering states. offering open houses, on-campus visits and outreach programs.

## Osteopathic Week celebrated

WVSOM students sponsored several events centered around "Women's Health" in celebration of National Osteopathic Medicine Week, Nov. 12-18.

The most unusual event was "Mom's Day Out." Sponsored by the Undergraduate American Academy of Osteopathy (UAAO) student group, the idea was to provide free child care so moms and dads could take care of chores, have a night out, or just catch up on some neglected sleep.

"We thought our classmates in the community who are parents could benefit from having a couple hours of free babysitting to do whatever they'd like," explained UAAO president Jason Oreskovich, a second-year med student.

Another event at the school was a luncheon sponsored by the student service group Delta Omega. Angel Brown, a first-year student, discussed her experience as a mid-wife. She practiced in California and West Virginia before deciding to attend medical school.

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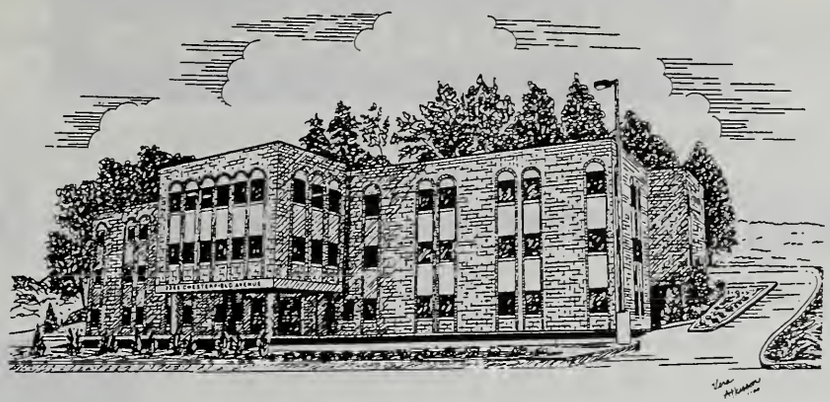

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# Alliance News

## Looking forward to the New Year

The members of the WVSMA Alliance are excited about the completion and fulfillment of many projects which they have been devoting their efforts to during the past year.

Susan Paddock, president of the AMA Alliance, has been working hard to promote membership, SAVE programs in schools, and to form an even stronger bond between alliances and medical societies. She is traveling to as many states as possible to make the the voice of the Alliance be heard. If your spouse is not a member of the Alliance, please have her or him join as soon as possible. If membership in the Alliance increases, our state will benefit as well as the AMA Alliance. We need as many members as possible to help Susan reach her goals of increasing membership, promoting Stop America's Violence Everywhere in schools, joining together to create stronger bonds between the alliances and medical societies.

In West Virginia, the various Alliance leaders are talking, e-mailing, and planing to have a meeting early next year to promote oneness among the alliances in the state. A training session was held at the Fall Board Meeting for county leaders. Jeanne Morrison from Mississippi, a national Alliance leader, was the guest speaker. Much information was shared and talked about during our brief period of time together.

As you travel the roads of West Virginia, you may notice several billboard signs that have our SAVE logo prominently displayed. We are moving ahead to make people more aware of the Alliance. Now when people notice the billboards and ask people in a community what SAVE means, hopefully they can describe the program and explain its significance.

West Virginia was well represented at the Southern Medical Auxiliary meeting in Orlando during the first week in November. Harrison County proudly displayed their poster projects and their members were awarded three first place ribbons. Ohio County placed 2nd for their project. Special recognition was given to Linda Elliott for her work on the cookbook to benefit cancer research and other health-related projects. In addition, congratuations are sent out to Janie Altmeyer for being awarded the Auxiliary Member of the Year for her work in breast cancer awareness. Way to go Harrison and Ohio counties — keep up the good work!

With 2001 just days away, there is still much to accomplish and much to learn. An area that will be receiving special attention is the medical students and their spouses. Plans are being made to present programs to these future physicians and their spouses and elicit their help in creating new and innovative ways to carry out our projects.

As we move forward, I wish want to wish each of you a Happy New Year and I hope that your spouse, if not already a member, will be joining forces with us soon.

Betty Kuppusami
President, WVSMA Alliance

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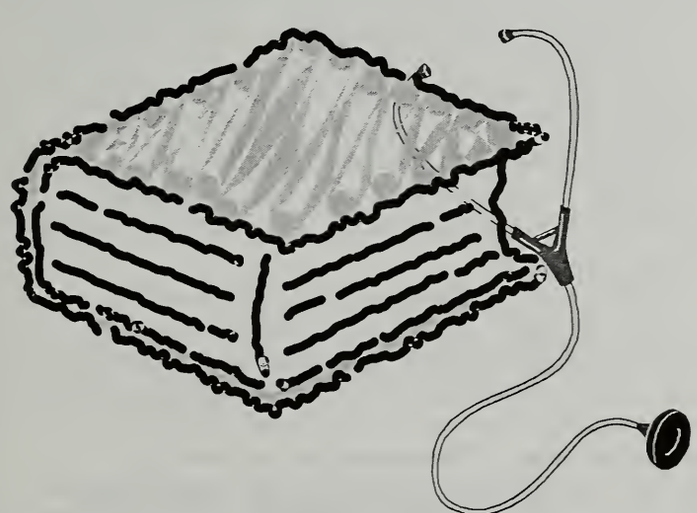

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# Obituaries

## Ralph Hogshead Jr., M.D.

Dr. Ralph Hogshead Jr., 81, of Morganton, N.C., died October 7 at Wake Forest University Baptist Medical Center in Winston-Salem.

Dr. Hogshead was born in McKendree, W.Va., the son of the late Dr. Ralph Hogshead and Norma Snodgrass Hogshead. He grew up in Montgomery and graduated from West Virginia University, where he also attended medical school for two years before going to Temple University Medical School to complete his degree.

During World War II, Dr. Hogshead served in the Medical Corps of the Army Air Force. He began practicing medicine in Morganton in 1948 and he treasured his friendships with the doctors and nurses at Grace Hospital.

Dr. Hogshead served as a deacon at First Baptist Church where he was an active member in the Chancel Choir and the Ralph Hogshead Sunday School Class. He was a Ham Radio operator, a private pilot, a member of the Civil Air Patrol and of the Morganton Rotary Club for 50 years. As a Rotarian, he served as past president and was honored by being named a Paul Harris Fellow.

In addition to his parents, Dr. Hogshead was preceded in death by his sisters, Sue Ann Hogshead, Mary Hogshead and Dr. Ida May Steele. Surviving are his wife, Ruth Cheney Hogshead; his son, Charles Ralph Hogshead of Tulsa, Okla; a daughter, Judith H. Jordan of Winston-Salem; and a brother, Dr. George Hogshead of Nitro, W.Va.

Memorial contributions may be made to the First Baptist Church Music Memorial Fund, P.O. Drawer 459, Morganton, N.C. 28680-0459.

## Lawrence J. Pace, M.D.

Dr. Lawrence J. Pace, 91, a past president of the WVSMA and one of the Princeton area's leading humanitarians, died at his home in Princeton on September 10.

As a physician in Princeton since 1937, Dr. Pace was responsible for many innovative changes and improvements to health care and delivered more than 10,000 babies. He was also a very active civic and church leader, taking leadership roles in the establishment of Princeton Community Hospital, Princeton Health & Fitness Center, the Medical Arts Building, the *Princeton Times*, the local Red Cross bloodmobile and other community endeavors.

Dr. Pace was the son of the late Vincent Joseph and Theresa Demma Pace. He was a 1934 graduate of the University of Virginia Medical School and he completed his internship and residency at the University of Virginia Hospital. He moved to Princeton to practice obstetrics and gynecology in 1937 and remained a resident there with the exception of the years he served in the U.S. Army Medical Corps in the European Theater during World War II. He achieved the rank of captain and received three medals in battles of Europe, Normandy Beach and England. He was promoted to chief of orthopedics at the 2,000-bed 110th General Hospital in England.

A strong leader in health care endeavors that benefited the community, he was instrumental in raising funds to purchase the first iron lung machine in Mercer County. With the help of the local radio station, Dr. Pace raised $2,500 within 24 hours.

Dr. Pace spearheaded the drive to build Princeton Community Hospital and was instrumental in having the local emergency room properly staffed. Working with staff members and community leaders who owned the Princeton Memorial Hospital, he helped established the funds to open the new hospital in 1970. He served as the first chief of staff for PCH and was a past president of the hospital's board of directors. Even after retirement, he played an active role in PCH activities.

Dr. Pace served as president of the WVSMA from 1962-63 and was a past president of the Mercer County Medical Society. He served on the original board of directors of Mylan Labs and was also a past member of the Mercer County Board of Health. He helped organize the Mercer County Association for Retarded Children and was instrumental in establishing a program for retarded children at Southern Highlands Community Mental Health Center in Princeton.

Dr. Pace was among the founding fathers of the *Princeton Times* and served as newspaper's original president. He was a director and charter board member of Mercer County Bank. He was also a past president of the Princeton Rotary Club and a Paul Harris fellow. He was a past Exalted Ruler of Princeton Elks Lodge #1459.

Dr. Pace was preceded in death by his wife of 63 years, Nettie Zell Elswick Pace this past January. Also preceding him in death was one son, Lawrence J. "Pacie" Pace Jr., and an infant daughter, Veronica Lee Pace; one brother, Charles Joseph Pace and two sisters, Lena Veronica Pace and Annie Margaret Pace. Survivors include one daughter, Margaret A. Pace; one son, Charles W. Pace and his wife, Connie, all of Princeton; two grandchildren, Charles W. Pace Jr. and his wife, Tiffany, of Charleston, and Cynthia Pace Jones and her husband, Donnie, of Beaver; one sister, Marguerite DiGiovani of Washington, D.C.

Memorial contributions made by made to Pam's Place, c/o Pam Hawkins Foundation, P.O. Box 1153, Princeton, WV 24740; or to the Sacred Heart Catholic Church Parking Lot Fund, 507 Harrison St., Princeton, WV 24740.

## Judith Sams

Judith Ann Starcher Sams, 57, of Parkersburg, died November 19 at Cleveland Clinic.

Mrs. Sams was the wife of Dr. Robert Sams of Parkersburg and was a nurse and a board certified counselor. She served as president of the Parkersburg Academy of Medicine Auxiliary from 1975-76.

A member of the Alpha Chapter of Ohio University, Mrs. Sams was listed in Who's Who of American Women for 1995-96. She was a member of the Board of Psychiatric Associates/Worthington Center Inc. for many years and started the Adult Crisis Stabilization Program, which serves as an alternative to hospitalization for many people. She was loved by patients and staff alike. She was also known for her generosity and caring, especially when working with patients of the Center.

In addition to her husband, Mrs. Sams is survived by two sons, Robert Steven Sams and Eric Jason Sams; one daughter, Patricia Ann Sams; her parents, Clifford and Virginia Starcher of Vienna; one sister, Jean Broughton of Marietta; and one aunt, Minnie Zinn of Parkersburg.

## Peeng J. Tsai, M.D.

Dr. Peeng J. Tsai, 65, of Fairmont, died December 11.

Dr. Tsai was born in Taiwan and was the son of the late Tein Far and Shiew Kwei Shieh Tsai. He trained at the University of Chicago in general pediatrics and in pediatric cardiology and neonatology.

In the early 1970s, Dr. Tsai came to Fairmont and ran a solo practice for 25 years. He dedicated his life to his work with children and helping the people of Fairmont.

He is survived by his wife, Yu Huey Yang Tsai of Fairmont; a son, John Z. Tsai, M.D. of Dallas, Texas; three daughters and two sons-in-law, Patricia, M.D., and Allan Chen, M.D., of Nashville, Catherine E. Tsai, M.D., and Lisa, M.D. and Charles Hsu, M.D., all of Pittsburgh, Pa; four brothers, Ping Yung Tsai of Houston; Peeng Yuong Tsai of Brazil, Spencer Tsai of Houston and Ping Shun Tsai of Taiwan; two sisters, Mei Fun Tsai, both of Taiwan; and four grandchildren, Michelle and Melissa Chen and Michael and Thomas Hsu.

## Paul E. Vaughan, M.D.

Dr. Paul E. Vaughan, 90, of Beckley died at home on June 20 after a short illness.

Dr. Vaughan was born in Fraziers Bottom, W.Va. He received a bachelor's degree and did pre-med studies at West Virginia University and then obtained his medical degree from the University of Pennsylvania. He served his internship at Charleston General Hospital and was a practicing surgeon at Raleigh General Hospital in Beckley.

Dr. Vaughan was an Army veteran and an Army Air Forces veteran. He had been a member of the WVSMA since 1942 and was a member of the Raleigh County Medical Society.

Surviving are his wife, Madalene M. Miller Vaughan; sons, Paul Michael of Beckley, David B. with the Army in Virginia, and Dr. Richard A. of Morgantown; brothers, James A. of Corvallis, Ore., T.W. of Eatonton, Ga.; five grandchildren; two stepgrandchildren; one great-grandchild; and two stepgreat-grandchildren.

The family suggests donations to The Salvation Army, P.O. Box 1573, Beckley, W.Va. 25802-1573, the WVU Foundation or a charity of choice.

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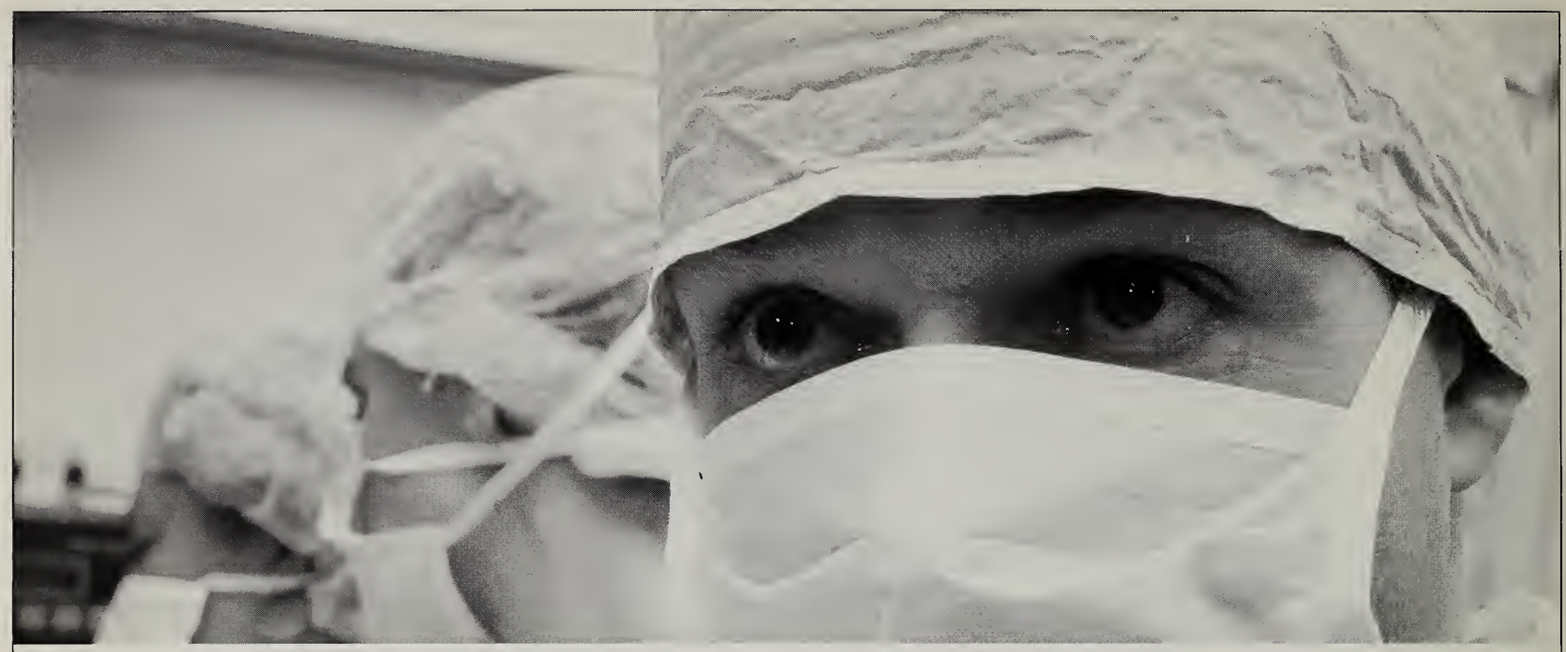

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